

ENVIRONMENTAL TOBACCO SMOKE

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BEFORE THE
COMMITTEE ON
ENVIRONMENT AND PUBLIC WORKS
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WEDNESDAY, APRIL 1, 1998

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
Washington, DC.

The committee met, pursuant to notice, at 1:30 p.m., in room 406, Dirksen Senate Office Building, Hon. John H. Chafee (chairman of the committee) presiding.

Present: Senators Chafee, Warner, and Baucus.

OPENING STATEMENT OF HON. JOHN H. CHAFEE, U.S. SENATOR FROM RHODE ISLAND

Senator CHAFEE. I want to welcome everyone here and to thank our witnesses for taking the time to be with us. Some have come a considerable distance and we appreciate that.

The purpose of today's hearing is to examine the Federal role in reducing the exposure to environmental tobacco smoke, or ETS.

The effects of environmental tobacco smoke on children less than 18 months of age are clearly staggering. These statistics I give you are EPA statistics. Up to 15,000 of these children 18 months or younger are hospitalized each year with lower respiratory tract infections such as pneumonia and bronchitis. As many as half of the 5,000 cases of Sudden Infant Death Syndrome may be caused by environmental tobacco smoke.

Researchers also estimate that ETS lowers the birth weight of up to 19,000 babies, and everyone knows, a baby born with low birth weight represents a tremendous risk health-wise, not only during the early months but for the child's lifetime possibly. ETS causes at least 250,000 middle ear infections and 8,000 new cases of asthma in children each year.

In adults, ETS causes 3,000 lung cancer deaths every year. It contributes to heart disease, breathing disorders and other forms of cancer, literally dozens of studies reaffirm each of these findings. ETS poses a difficult public policy issue.

The ETS exposure of most concern is beyond the reach of the Federal Government. What are we talking about? Those most vulnerable to ETS are children and non-smoking adults who live with smokers. The parent is a smoker and the child suffers. The greatest single problem is smoking in the home.

Workplace exposures are of concern, but only if an individual is exposed to significant concentrations of smoke during working hours. Bars and restaurants are among the smokiest workplaces and can result often in health problems. It's the employees, however, not the patrons, who are most at risk.

What legislative approach would most appropriately address this problem? The proposed tobacco settlement of the Attorney General contemplates the regulation of every building in the Nation that has not banned smoking altogether and is entered by 10 or more people on any day. Now, that's a very low threshold. In other words, the dry cleaner, the photographer's shop, the dress shop, every such shop that hasn't banned smoking altogether would be regulated under the Attorney General's proposal. Bars and restaurants would be exempted.

Now, this approach would do little to reduce the exposures of real concern. As we mentioned before, it's children whose parents smoke that experience the real danger. It may be that the best action would be an aggressive advertising campaign about the dangers of ETS, especially to one's children. I believe that once they are armed with the facts, parents will take the steps necessary to protect their children.

Workplace protections are needed, but not in every building. Changing attitudes about smoking, coupled with State and local smoking restrictions, have greatly reduced smoking in the work place. I believe it is inefficient to have Federal regulation of every building in the Nation to get at a problem that exists in only a few places.

However, this isn't an easy problem to solve, and we look forward to hearing from the witnesses today. Our first witness, and we're delighted that she is here, the Administrator of the Environmental Protection Agency, an Administrator that we've had the pleasure of working with through many different pieces of legislation in this committee. We welcome you, Ms. Browner.

**STATEMENT OF HON. CAROL M. BROWNER, ADMINISTRATOR,
ENVIRONMENTAL PROTECTION AGENCY**

Ms. BROWNER. Thank you, Mr. Chairman. I am delighted to be here to testify on one of EPA's most vital issues, the serious health risks posed by second-hand tobacco smoke. I want to begin, Mr. Chairman, by saluting you for calling attention to this extremely important and preventable public health dilemma.

I also want to applaud the leadership of your colleague, Senator Lautenberg, for the work he's done to prevent smoking in schools, and perhaps somewhat from a personal perspective, on domestic airlines. I think all of us who find ourselves on airlines each and every week know what a difference that has made.

I don't want to mince any words. I want to be very clear about the risks of second-hand smoke. It causes cancer. EPA studies have shown that it may be responsible for approximately 3,000 adult lung cancer deaths each year in non-smokers. Short and simple: people who choose not to smoke but are exposed to smokers suffer very real and in some instances, permanent health effects.

But the fact that second-hand smoke causes cancer in otherwise healthy non-smoking adults is only part of our concern. Mr. Chairman, I think you, like I and many, many Americans, were outraged to learn about documents showing that major cigarette manufacturers had over many years actually targeted children in their marketing programs. Well, let me tell you about what tobacco smoke is doing to children who never even pick up a cigarette.

Infants and young children who are exposed to second-hand smoke experience lower respiratory tract infections such as pneumonia and bronchitis, with as many as 300,000 cases occurring each year. Asthmatic children exposed to second-hand smoke can experience aggravated asthma attacks, resulting in nearly 2 million outpatient visits and 28,000 hospitalizations each year, according to a recent study in the Archives of Pediatrics, a journal of the American Medical Association.

Children exposed to second-hand smoke are more likely to experience a buildup of fluid in the middle ear and infection of the middle ear. Often this will require an insertion of an ear tube, which is now the most common surgical procedure performed on children in the United States. According to the study I just mentioned, 3.4 million acute ear infections each year are attributable to exposure to second-hand smoke. The cost to treat those, not including the lost work days, not including the lost school days, simply getting to the doctor and getting a prescription for your children, is \$44, for a total of \$150 million per year.

Finally, Mr. Chairman, a number of recent studies have provided strong evidence associating second-hand smoke with Sudden Infant Death Syndrome and the onset of asthma in young children.

Now, where are most children exposed to second-hand smoke? Why does this problem occur? Very simply because too many children are growing up in a house where one or more adults are smoking, frequently their parents, but perhaps others. According to the Centers for Disease Control, in 1991, nearly a third of all children, one-third of all children, were exposed to second-hand smoke daily in their homes. As a group, these children missed 7 million more school days than children who were not exposed.

Children exposed to second-hand smoke accounted for 10 million more days bed confinement, 18 million more days of restricted activity than other kids. And as the Archives of Pediatrics study concluded, children's illnesses from second-hand smoke are costing the country almost \$4.6 billion every year.

Now, Mr. Chairman, as you yourself noted, we have seen a rapid acceleration of measures to protect non-smokers in a variety of settings: workplaces, restaurants, sports facilities, shopping centers, Government buildings and other public facilities. And the result has been a substantial decrease in workplace exposures, although workers in the service industries and, in particular, the hospitality industry, experienced greater exposure than office workers.

The National Cancer Institute estimates that as of several years ago, nearly half of all working Americans were in a smoke-free work place, and more than 80 percent were covered by some type of formal smoking policy. In contrast, only 3 percent of workers were covered by such policies as recently as 1986. So we are making progress in terms of the work place, but the job is not done. In terms of children, we have not seen this similar kind of progress. According to CDC, in 1996 approximately 16 million children were still exposed to second-hand smoke in homes.

What this shows us with respect to adults is that with a concerted effort, we can reduce the risk of illness from second-hand smoke. The damage we are talking about is preventable. And we are determined to do everything in our power to further reduce ex-

posure to second-hand smoke, particularly when it comes to our children. We believe that continuing to reach out, to educate adult smokers about the effects of second-hand smoke on children, is extremely important if we are going to protect our children.

I think it is important to continue to work in communities, day care facilities, schools, restaurants, and other public places where children are often present, to help reduce the exposure, to help reduce the risk, to help reduce the health effects. We believe that we must build on the partnerships that we have already established at EPA, partnerships, for example, with the American Medical Association, and the Consumer Research Council, to raise public awareness about the dangers of second-hand smoke. We must continue to work with international partners, the G-8 countries, the World Health Organization, and others to share information and scientific findings.

The bottom line is that we believe this issue is critical, especially to the health of our children. And we do believe that we can make a difference if we can provide the kind of information that parents can make the best use of, as we've done before on a number of issues. EPA has had extremely successful efforts on radon and you've seen the work done on seat belts, to educate people about what they must do to protect their own children. Then we can see tremendous progress in providing our children with a level of protection, preventing the illnesses that are occurring from exposure to second-hand smoke.

This is an absolutely preventable illness that our children are experiencing.

The Administration, Mr. Chairman, as you know, has called on Congress to pass strong comprehensive tobacco legislation. It has a number of sections to it, including, for example, provisions to reduce teen smoking. We also believe, and the President has said, that we must go even further in terms of our efforts to reduce exposure to second-hand smoke, that it is a large part of the problem, and it must also be a part of any legislation.

We would look forward, Mr. Chairman, to working with you and others to secure appropriate legislation, legislation that will protect children, will accomplish the public health goals, will look at where the greatest risks are occurring, where the greatest exposures are taking place, not just the work place. We will look at where we can have the greatest success in terms of providing a level of public health protection.

Mr. Chairman, that concludes my remarks, and I am more than happy to answer any questions. We do have a longer statement which we would like to insert in the record.

Senator CHAFEE. Well, thank you very much. Yes, I would, because you had some statistics there that I think were not in your original statement that would be very helpful to us.

I want to notify the other panels how we will proceed. What we're going to do is take them panel by panel. Ms. Browner constitutes the first panel. Then we will take up the second panel thereafter.

Madam Administrator, let me ask you this. As I see this, this breaks down into two groups. First, and we're always dealing with second-hand smoke, as far as doing everything we can to get teen-

agers not to take up smoking and all that. That's a separate category from what we're dealing with.

What we're dealing with here is, as I see it, two separate categories. First, children. And I suppose with children, we're talking 12 and under. That's the first group we're worrying about. The second group is adults, and the problems that come with them with second-hand smoke.

Let's talk about the children at first. Where the children are being affected by second-hand smoke is in their homes.

Ms. BROWNER. Yes.

Senator CHAFEE. And as you pointed out, nearly in every instance, it's a parent, maybe an uncle or brother or something around, but that would be unusual.

Now, we can't have smoke police coming into every house in America telling the parents what to do. So I agree with you, the solution is the best possible education campaign we can have. We've got to assume that when the parents know the facts, which you've dramatically given us here, that they will do what's best for their child.

Now, as you pointed out we've made great strides with seatbelts and other public health measures, just think of the choice of different foods we're talking about now, and we're alerting the public to them, and low-fat diets and everything like that. All that's just been an educational process.

Do you agree with me, now we're just dealing with the children, that that ought to be the approach we take, education of the parent?

Ms. BROWNER. Absolutely. I think a large-scale effort to directly educate parents about what happens when they smoke around their children, what the very real health consequences are, is extremely important. I think working through organizations that see parents on a regular basis is important. For example, the American Nurses Association, American Academy of Pediatrics.

There is a program now that many people have personally experienced where if you have a new child and you're leaving the hospital, they have to see that carseat. They ask to see the child in the carseat before you walk out the door, as a way to get parents to understand how important those carseats are.

Well, a program that would work with people who see parents on a regular basis that would educate parents, about the very real and the very preventable health effects that their children are experiencing, I think would go a very long ways toward addressing this problem.

Senator CHAFEE. As far as the low birth weight babies go, presumably that means getting the proper prenatal care and proper prenatal advice.

Now let's switch over to the other group, which is the adults. I noticed, as I mentioned in my opening statement, the Attorney General has had a proposal that every building that's visited by more than eight people—

Ms. BROWNER. I think it's 10.

Senator Chafee [continuing]. Ten people on any day, must either ban smoking or have a smoke-free place. And you didn't touch on

that. And that would be, I don't know who would enforce it. Give me your thoughts on that.

Ms. BROWNER. I think the workplace exposures continues to be a problem. I think we would all agree that we have made progress. There are now, I think the estimates are approximately 80 percent of workplaces have some smoking policy in effect in terms of telling people not to smoke or limiting where they can smoke. But only about 50 percent of workplaces have effective smoke-free policies, under which smoking is either prohibited or restricted to properly ventilated smoking areas.

But again, this is preventable. So I think we want to make sure that we have done literally everything we can to protect the individual in the workplace. I think that a combination of educational programs, State activities, and probably some Federal backstops, could get you what you need in terms of the workplace.

In our experience of dealing with large issues, and this is certainly a large issue, what we find is there are always those who are willing to come to the table early on and address a problem. They're not the challenge. It's those who are bringing up the rear. That very well may be where we have the problem today, when you think about the workplace broadly. Obviously the hospitality industry is something we should probably talk about separately.

But when you think about the more traditional workplace environment, whether it be an office building or something of that sort, we have made real progress. But we're not done. You still have people experiencing health effects because of an unwillingness, if you will, of the office manager, the building manager, to take what are some relatively simple steps. Many other places have taken them.

How do we reach that group? It may require a little bit more than what we have previously done, if we're going to reach those who are bringing up the rear.

Senator CHAFEE. Well, I must say, I'm quite reluctant, under the Attorney General's proposal, OSHA would enforce it, which is, you can heave a sigh of relief it's not EPA having to enforce it.

Ms. BROWNER. We would agree that OSHA would be the appropriate party. They are in these places in a way that we're not.

Senator CHAFEE. Of course, they exempt bars and restaurants, where I would suppose is the most dangerous place of all to be for a waitress or a waiter, particularly a bar. I must say, I'm very reluctant for the Federal Government to get into this business. Through education, yes.

You noted that the States and local communities and building owners have really made tremendous strides. I know we're going to have a witness on the next panel, the Director of the Massachusetts Tobacco Control Program. I'll be interested in what he has to say on that.

I share with you your "go-slow" approach for the Federal Government to enforce a non-smoking policy or a separate smoking room in every building in the United States with 10 or more people.

Ms. BROWNER. I think if you look at the health risks, if you look at the challenges in terms of people and their exposure to second-hand smoke, you see the greatest problem in children, without a doubt. The fact that large numbers of parents continue to smoke

around their children, they clearly don't understand what they are doing to their children—very real and costly health effects.

Clearly, the hospitality industry, and there the concern is again with the worker. There are studies that suggest restaurant second-hand smoke exposure is twice as high as an office environment. People who are working in that sector are experiencing some very real exposures.

In terms of other work environments, office buildings, etc., we have made progress as a country. I think what we're all looking at is how to complete that work. There is a category where it has simply not happened yet, and what is the best combination of tools to go ahead and pick up that remaining 20 percent of workplaces that do not have any formal smoking policy on the 50 percent that still allow some exposure. Something is happening that these workplaces have not developed effective smoking policies that would protect all of their workers, and particularly the workers who choose not to smoke.

Senator CHAFEE. Senator Baucus, did you want to make an opening statement?

Senator BAUCUS. No, thank you, Mr. Chairman.

This is a difficult subject. We all know second-hand smoke is harmful. The question is, how harmful.

What should the Government do about it. I must say, I share a lot of the chairman's concerns about how far to go in the public buildings. Also, I think it's true that the greater focus should be on children. I just don't know how you get parents who smoke to do the things they should do, smoke outside or not in the presence of children.

Do you have any thoughts on how to get parents what they should be doing here?

Ms. BROWNER. I touched on this briefly, but I think what is needed is a large scale public education effort. It's reaching out directly to parents through traditional media—radio, television, and print. We've had other programs of this nature that have been successful.

I think it's also working with people, working through institutions and professionals with whom parents have frequent contact—for example, pediatricians and nurses. I gave the example of baby carseats. There are now programs at many hospitals, if not all hospitals, that the nurses run, in which when one leaves a hospital with a newborn baby, one carries the infant in the carseat. They make you strap that baby into the carseat correctly when you go out to your car.

As someone who has experienced it personally, it's a very real experience. And you take it very, very seriously.

A program that nurses look to, the health care providers, at the time of birth to remind people, not only do you need to put that kid in a carseat, not only do you need to put that baby to sleep on its back to help contend with the SIDS problem, you need not to smoke around that child. And if you do smoke around that child, you need to understand what you're putting them at risk for: middle ear infections, \$44 per doctor visit and prescription to treat a middle ear infection; aggravated asthma.

I don't think people know what it is they're doing to their children. I think there is this tendency among many to think, well, just

hold the cigarette away, blow the smoke away. I think we have to educate people about what they're doing.

Senator BAUCUS. Do we do anything here in the Congress about it? For example, I agree that when OB/GYNs counsel patients, that's an opportunity, and when pediatricians see children, that's an opportunity. There are lots of stepping stones along the way.

But I would guess a lot of that is through the efforts of the medical profession or hospitals on their own.

Ms. BROWNER. If you go back to the example of seatbelts, there was a Federal investment in ad campaigns, in public outreach to educate people about the benefits of seatbelts. I don't know the history of it perfectly, and I think probably many in the private sector joined in that over time and may today do the lion's share of it.

But there certainly was a concerted effort on the part of the Government to make this kind of information available, and to show people the consequences, that I think was very successful. The other program that this committee has helped fund is our radon program, which is a public information program that has been very successful in getting people to test their homes and then take appropriate steps to reduce high radon levels.

While there are opportunities to work with existing institutions, and we are doing that, we should perhaps also look at how the Government can best sort of kick-start the educational process and generally that does require an investment.

Senator BAUCUS. That's right. In carseats, though, it's a direct, causal relationship, when you see accidents, which people can see and make the connection very quickly.

When it comes to second-hand smoke, it's not quite as obvious to most people. They may have a feeling that, it's probably a bit of a problem, but when your kid's in a car accident, that's definite.

So it seems like part of the solution is—as you have already today indicated what the problems are, ear infections and others—doctor bills to be paid.

Ms. BROWNER. Missed work days.

Senator BAUCUS. Missed work days and so forth. It's a real problem, I just don't if we know yet how to more effectively get at it.

Ms. BROWNER. I agree. I think one of the problems is people just simply don't know. I'm sure if we went out and did a public survey, we would find out that the vast majority of people, whether they be smokers or non-smokers, don't know that smoking around a child, smoking in the home of a child, can result in SIDS, can result in ear infections, and aggravated asthma.

Senator BAUCUS. Is there a tie between smoking and SIDS?

Ms. BROWNER. Absolutely. There are studies that show a better than twofold increase in the risk of SIDS in households with one or more smokers. The health effects that have generally been looked at in terms of children include respiratory illness, bronchitis, pneumonia, and aggravated asthma, inner ear infections, and buildup of fluid in the inner ear, requiring insertion of an ear tube, which is now the single largest cause of childhood surgery in the United States. A percentage of those infections are directly related to exposure to second-hand smoke. And then, finally, SIDS.

Senator BAUCUS. Thank you.

Senator CHAFFEE. Senator Warner.

Senator WARNER. Thank you, Mr. Chairman. I wish to associate myself with the remarks of the distinguished chairman and ranking member, and thank you for coming up. We're sitting here in the quietude of this room discussing a very serious problem, and one building over, there's literally a volcanic situation going on in the markup about tobacco. A nice contrast to sit here and reflect on it.

I think I speak for the members of the committee to take the opportunity to say how much we admire the work you've done and the manner in which you've discharged the important duties of the cabinet office.

Ms. BROWNER. Thank you.

Senator WARNER. We may not always agree with you. But you're fair and square.

Ms. BROWNER. Thank you.

Senator WARNER. I'm trying to not call you a model cabinet officer. Someone called me a model Senator one time, and I was pretty flattered about it. Then I went home, my daughter was living with me, and she looked in the dictionary and said, Daddy, I don't understand this thing. Because the definition in the dictionary, a model is a drastically reduced version of the real thing.

[Laughter.]

Senator WARNER. You probably won't be able to answer this question, but I'm quite interested in this question as it relates to bars and private clubs and the people who have to constantly work in there. Are you doing some research on the types of equipment that could be installed to help reduce the smoke levels? Could you provide for the committee what you've learned in this area?

Ms. BROWNER. We have actually developed and made available recommendations on how to manage an area or part of an office building if you want to allow for smoking. It's really quite simple. It has to be separately ventilated, it has to be maintained under negative pressure, so that when you open and close the door, the smoke doesn't escape into other spaces. The air from smoking areas should be moved with a direct exhaust to the outside. Many buildings have chosen to do this. There is a way to do it.

Senator WARNER. So there you do have a model, so to speak, of what can be done, and that data is available, you disseminate it to the public?

Ms. BROWNER. Yes, we make that available. In fact, some regional EPA buildings have these kinds of facilities. Some airports have them now.

What that does, obviously, is decrease the risk to the worker, when they are outside of that area. Now, when they go into that area, in the case of a bar or restaurant, to serve the patrons, they do experience some exposure. But obviously it is less than what they experience if they are in an environment where there is no effort to isolate the smoke and to discharge it to the outside.

Senator WARNER. That's very interesting. Well, I commend you again. Since I scored with my first story, when I first came here, I joined the Armed Services Committee, 19 years ago. And to be on that committee, you had to smoke cigars. I remember the day going in there, you couldn't see the witness table for the smoke that was coming around in that room. We've come a long way here in the Congress, thanks to education.

Ms. BROWNER. Yes, you have.

Senator WARNER. I don't know that I've contributed a lot, Mr. Chairman, but I commend you.

Senator CHAFEE. Well, I certainly remember when a smoke-filled room designated complete political activity. This is a little clipping from November 10, 1962. I was in a long count running for Governor for the first time, and was behind on the machines.

But then there were a whole series of absentee and shut-in and servicemen's ballots that had to be counted. This is an elaborate process, every one meticulously reviewed, since I was only 38 votes behind, when the machines were finished, and we had 12,000 or 13,000 of these ballots out there, so every one counted.

But they conducted the count in a very crowded, smoke-filled room where the atmosphere was intense. And somebody made the mistake of opening the door to air out the place, whereupon there were screams of "shut that door!" They were used to operating in a smoke-filled room and they didn't want anything changed.

[Laughter.]

Senator WARNER. There's a little story in the Senate, in the late 1800's, so much smokeless tobacco was used, that they would periodically fall over the spittoons. There came a time when the rug got so sticky, it began to take the shoes off a Member. They finally began to curtail it.

[Laughter.]

Senator WARNER. You leave with a lot of erudition from this hearing.

Ms. BROWNER. I do, thank you.

Senator CHAFEE. Senator Baucus.

Senator BAUCUS. Mr. Chairman, since we're straining here a little bit—

[Laughter.]

Senator BAUCUS. A question just came across my mind. The question is airlines, quality of air in airlines. It's been my feeling, I'm not going to get into this deeply, that before smoking was banned on flights, that airlines really didn't clean the air out as much as they really could. I'm told the reason why is because it just cost money and fuel.

Now that airlines do ban smoking on most flights, airlines have cut back even further on air circulation. I was wondering, the air circulation is much better in the cockpit than it is in the cabin. I wonder if you could tell us what you know about the quality of air in airline cabins.

Ms. BROWNER. I can speak from personal experience. I have also asked, not perhaps in an EPA professional manner, why it is there seems to be less and less air circulating. I've been given the same answer, which is the concern for fuel economy, and that they can save fuel if they don't bring as much fresh air into the cabin.

Cabin air quality has become an issue of concern to many people and to DOT. The FAA is now working on a cabin air quality study in conjunction with the National Institute for Occupational Safety and Health. I think many people have a similar experience, which is there just seems to be less and less fresh air.

Senator BAUCUS. I'll be interested to see that study.

Senator CHAFEE. Madam Administrator, we thank you very much. I just want to briefly see if I can summarize your position. First, as far as the parents go and the danger to children which we totally agree on, you believe we should have a vigorous education process so that parents will understand the dangers they cause by smoking around their children, or just smoking in the house where the children are. That's the first, we're agreed on that, right?

Ms. BROWNER. Yes.

Senator CHAFEE. Second, on the next point, you are not embracing the Attorney General's proposal that there be a requirement that every building in the United States that's entered by 10 or more people any day of the week must either ban smoking or build a separate smoking room, with restaurants or bars exempt. You would not endorse that, again you would endorse the educational process and the continued encouragement of the actions that are taking place on the municipalities, the States, and so forth. Is that a fair summary of your position?

Ms. BROWNER. Let me say it perhaps a little bit differently. In terms of the settlement, I think that the settlement falls short in addressing risks to children, that that's a real problem with the settlement that needs to be corrected in legislation. I think that it is extremely important that we build on the success we have made in the workplace, and that it may require some sort of Federal backstop, partnered with some incentives and work with the States to address the remaining workplace exposure that is occurring.

I think with respect to the hospitality industry——

Senator CHAFEE. Well, let me just finish, before we get into restaurants and bars, some backstop, I've made it very clear and I think Senator Baucus indicated he agrees, there is a great reluctance for the Federal Government to try and go out and enforce these. I think if a backstop includes some financial aid, possibly, to the local communities, the State, the municipality, in enforcing these, that I would not find highly objectionable.

But do you agree, do you have the same reluctance I have, of the Federal Government, through OSHA or EPA or whoever it is, trying to make this a national enforcement?

Ms. BROWNER. Senator Chafee, the concern I have is some States have been really out front in working to ensure protections in the workplace and others have done nothing. What happens 5, 6, 7 years down the road when we still have a handful of States where literally no workplace protections have been put in place? What is the provision that allows those people in those States to be provided a level of protection?

That's my real concern here. I think you are going to need, if history is any guide, we will need some sort of Federal backstop, some ability, and there are many mechanisms existing in law today, for the Federal Government to ensure that workers and the public in every State are afforded protections from involuntary exposure to second-hand smoke.

Senator CHAFEE. OK.

Senator BAUCUS. So you agree with the proposed settlement provisions?

Ms. BROWNER. I don't think that those are the only way you can provide the level of protection. Again, I think the settlement is short on some of those.

Senator BAUCUS. How much farther would you go?

Ms. BROWNER. I think you could have provisions, for example, that required States to put in place programs to enforce those provisions by a date certain. Lots of lead-in time, but failure to do so within a designated timeframe would have a repercussion. What that repercussion is, there are any number of models available in the law today.

I want to be clear about this, I do think we're making real progress. But I think, as I said earlier, there are those who are just not coming along. That's always the most difficult challenge, how do you speak to the people bringing up the rear, the people who, despite all of the evidence, despite what many states and many thousands of workplaces have already done, just refuse to do it? Why should someone who has to work in that environment be denied a level of protection?

The Federal Government should ensure a backstop, a floor, so that everyone is ultimately protected in the workplace.

Senator BAUCUS. Thank you.

Senator CHAFEE. Thank you very much, Madam Administrator. We appreciate your being here.

The next panel consists of the Honorable Carla J. Stovall, the attorney general of Kansas; Dr. Greg Connolly, director of the Massachusetts Tobacco Program; and Dr. Michael Eriksen, director of Office of Smoking and Health, National Center for Chronic Disease Prevention, Centers for Disease Control, Atlanta.

We're glad you're all here, and I would ask Attorney General Stovall if you would be good enough to proceed. Everybody will be allowed 5 minutes, the green means proceed, the yellow means please try to wind up.

**STATEMENT OF CARLA J. STOVALL, ATTORNEY GENERAL,
STATE OF KANSAS**

Ms. STOVALL. Thank you very much, Mr. Chairman, for the opportunity to be here. I have a few remarks that I would like to make orally and would ask for the entire written testimony to be submitted as a matter of record.

Senator CHAFEE. That will be fine.

Ms. STOVALL. As you know, the June 20 agreement of the Attorneys General dealt with many, many issues. This is one, the environmental tobacco smoke, that tends to be overlooked, I think probably because it doesn't bring with it the controversy that so many of the other issues do. But we are very appreciative that your committee would take the time to hold hearings on this very important topic and to consider the deadly consequences of smoking.

The dangers of smoking and the health consequences you heard from Administrator Browner, I know you will hear it from the doctors on this panel and others who are more capable of talking about that than myself. Suffice it to say, I think we all understand there are tremendous health consequences to second-hand smoke and environmental smoke.

So let me address the agreement, if I can. We all understand that there is significant exposure at home to children from parents who smoke. We certainly applaud the language that you have put together with your co-sponsors that tries to get at the education of parents, so that they don't smoke in homes and expose their children to that.

I wish that there were home police, frankly, that would patrol that. Because my sister, who is a last semester nursing student, smokes in her home with my 12-year-old nephew, my 7-year-old nephew and my 6-year-old niece. She is someone who is educated, who understands and yet doesn't stop and neither does her husband.

Nonetheless, I think it's something that the educational effort suggested by your legislation will be able to help with.

The proposal, though, as far as the Attorneys General standpoint, was limited to businesses, and the idea that 80 percent of non-smokers' exposure—

Senator CHAFEE. I tell you what, just so we can save time when the others come up to speak, all the others, if we all agree on the approach toward parents not smoking being the educational process, if somebody differs from that, then obviously, go into it. If we're all in agreement on that, I wouldn't spend too much time. You haven't spent too much time, but I think it's an issue. And your sister's a naughty girl to smoke around those children.

Ms. STOVALL. Yes, she is, and I'm glad that's part of the congressional record.

Senator CHAFEE. We'll send her a copy.

Ms. STOVALL. You may be more successful than I am.

But the Attorneys General, in dealing with the agreement, have focused on the workplace and the environmental smoke there. Approximately 80 percent of non-smokers' exposure to environmental tobacco smoke comes in the workplace. So that's what we have focused on.

Let me talk about the agreement in particular. There are strong proposals, strong requirements to minimize that exposure to environmental tobacco smoke. The proposal would say that we restrict indoor smoking in public facilities with the population that you mentioned earlier, it would require exhausting the air directly outside, maintaining negative pressure, not recirculating the air inside. We don't want any employees to be required to work in a smoking area.

The restaurants, bars, private clubs, etc., are exempted, with the exception of fast food, because those tend to be places that children frequent. We leave it in our language for OSHA to actually describe what a fast food restaurant is. Suffice it to say that it's the McDonalds of the world, where there are Happy Meals, children's playgrounds and the like.

In making those provisions in the agreement, keep in mind if you would that we were crafting a settlement. We had the tobacco companies at the table and the Attorneys General with very different goals and motivations. But we did craft a settlement.

I think the exceptions we made for restaurants, bars, etc., are those that tend to be the most controversial. If there is any support

for maintaining smoking in certain places, it would probably be in those particular facilities.

The public health advocates were at the table, and while that community is not unanimous in all of its provisions, they nonetheless supported this, as did the tobacco companies. The provisions themselves were taken from Congressman Waxman's 1994 bill.

There are provisions in Senator McCain's bill, which is being debated as we speak in another committee, that would allow States to opt out of this particular provision. They could say they don't want this to apply to their States. That is a provision Senator McCain put in; it was not part of our agreement. Our agreement said that there was no preemption, and that States or localities could do much more than what was in the agreement.

OSHA has a regulation that would attempt to deal with this. But as you know, they have had hearings for 6 months. Those hearings ended more than 2 years ago. We are told that it will be at least another 4 years before final regulation is really on the horizon. In that length of time, another 212,000 people in America will die from second-hand smoke, 80 percent of those coming from the workplace.

There is nothing revolutionary about what we've proposed: 45 States have indicated they want some restrictions, and have taken those restrictions. Public support seems to be overwhelming for restricting smoking in the workplace.

Mr. Chairman, I appreciate the opportunity to be here on behalf of the Attorneys General and to talk about the importance of restricting environmental tobacco smoke.

Senator CHAFEE. All right, I'll have some questions.

Dr. Connolly.

STATEMENT OF GREGORY N. CONNOLLY, DIRECTOR, MASSACHUSETTS TOBACCO CONTROL PROGRAM, MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH

Dr. CONNOLLY. Thank you very much, Mr. Chairman. I want to note that my wife is from Rhode Island, she's from a very, large family. I think there's enough in the family to give you 38 more votes if you ever go for re-election.

Senator CHAFEE. You're doing very well.

[Laughter.]

Dr. CONNOLLY. Massachusetts is fortunate to have a large tobacco control campaign which is funded by a ballot initiative, where we allocate approximately \$30 million a year to curb smoking in our State.

Senator CHAFEE. Does that money come from an earmarked fund in any fashion, or just appropriations?

Dr. CONNOLLY. It was a ballot question before the voters in 1992, and through the ballot question, they dedicated approximately \$30 million to the tax. It is subject to appropriation by the legislature, but the legislature has followed the will of the voters.

Senator CHAFEE. Does it come from the tobacco tax?

Dr. CONNOLLY. Yes.

We commit about half the money to prevent youth smoking and about 25 percent to help adults quit, and about 25 percent to curb second-hand smoke. We spend more in Massachusetts than the

Federal Government currently spends on tobacco prevention nationally. That's not our problem, it's the Federal Government's problem.

By going after environmental tobacco smoke, we protect the health of the non-smoker from diseases associated with second-hand smoke, but we also de-normalize the behavior of smoking, of lighting up dried vegetable matter in enclosed spaces. It motivates the adult smoker to quit.

Of our money, we commit about \$13 million to paid, hard-hitting, counter-advertising. We believe that's essential, to get a message out on the airwaves to counter all the messages that promote smoking.

We also commit another \$5 million to local communities. We fund the communities to pass ordinances to curb second-hand smoke in restaurants, private work sites, municipal buildings, as well as enforcement. Any settlement that comes down should commit dollars to States and the local level for education and for enforcement at the local level.

The acronym I use, Senator, is KILLS, "Keep It Local and Loud, Stupid," if you want to affect social behavior. Get it down to the community level, that's where you affect the social behavior.

It has worked. Since we launched our campaign, we've seen smoke-free work sites rise approximately 70 percent. Even in the home—

Senator CHAFEE. Dr. Connolly, I've got a problem here. There's a vote on now, a back to back vote, I've cut it so close that when they go in to the next vote I'll be right there.

So I've got to hold you right now, I'll go right over and make these two votes and come right back. If everybody could just relax a minute, I'll be back.

[Recess.]

Senator CHAFEE. I apologize, last there's nothing I can do about it.

So let's proceed, Dr. Connolly, right from where you were. Your testimony is very interesting.

Dr. CONNOLLY. I just want to state, Senator, that we took this tax money, dedicated tax money, we allocated large amounts of dollars for paid advertising, gave local communities funds to pass and enforce local ordinances. We have been highly successful. Boston has eliminated smoking in restaurants, we have seen about 80 percent of municipal buildings go smoke-free.

And through the advertising campaign, 60 percent private homes with at least one smoker have stopped smoking on a voluntary basis.

And by restricting smoking, we've helped adult smokers to quit. One-third fewer cigarettes are sold in Massachusetts today than were sold 3 years ago. A lot of that is helping them to quit directly, a lot of it is price. But it's also just de-normalizing the behavior overall. Adult prevalence in Massachusetts has fallen from 23 percent to about 20 percent today. Among young people—

Senator CHAFEE. What was that statistic, pertaining to what?

Dr. CONNOLLY. Adult smokers, the prevalence rate, that is, the number, the percent smoking, fell from 23 to about 20 percent today. So we've seen 100,000 fewer smokers. And I think it was

driven in large measure by getting them knowledge about the dangers of ETS.

So it does work. If the Senate does enact legislation this year, I would urge that money be dedicated to paid counter-advertising about the dangers of second-hand smoke, and also to fund local communities to enforce it. If I could just show you a few ads that you can actually see in Providence, RI tonight, via a Massachusetts television station.

Could I have those ads shown? These are what we call good cop-bad cop ads. Some ads are very tough on ETS. They get the smoker mad, but we try to show some good cop-outs.

[Video presentation.]

Dr. CONNOLLY. The ad basically said, every day, 3,000 kids get sick from second-hand smoke, but the tobacco industry does not want us to hear it. We didn't blame the smoker, we blamed the tobacco industry. So we didn't make the smoker feel upset or bad.

[Video presentation.]

Dr. CONNOLLY. That's our good cop ad.

[Video presentation.]

Dr. CONNOLLY. Those are our ads. The good cop-bad cop. We don't try to blame the smoker. We try to provide support, to give the smoker an appropriate vision. And they've worked. People in the State believe second-hand smoke is harmful. We've seen Logan Airport go smoke-free, Boston restaurants, all State buildings, all schools, even Fenway Park and Foxboro Stadium, which we hope will stay in Massachusetts, are smoke-free today.

Thank you, Mr. Chairman.

Senator CHAFEE. Well, thank you very much, Dr. Connolly.

And now, Dr. Eriksen.

STATEMENT OF MICHAEL P. ERIKSEN, DIRECTOR, OFFICE OF SMOKING AND HEALTH, NATIONAL CENTER FOR CHRONIC DISEASE PREVENTION AND HEALTH PROMOTION, CENTERS FOR DISEASE CONTROL AND PREVENTION

Dr. ERIKSEN. Thank you, Senator. I will be brief, and only comment on things you haven't heard yet today.

Administrator Browner addressed the health effects well. But let me say some things that haven't yet been said. In 1996, CDC published a study that showed that over 85 percent of the U.S. population had detectable levels of serum cotinine in their blood. Cotinine is a biological marker for exposure to second-hand smoke.

So 85 percent of Americans were exposed, yet only 40 percent knew that they had been in a workplace or had exposures that were recordable. So there is a larger level of exposure that is detectable than is reported.

Second, we did another study that looked at the number of kids who are exposed in their homes. And we found that it ranged from a low of 12 percent in Utah to a high of 35 percent in Kentucky. Mr. Chairman, in your State, we estimated that 24 percent of the kids in Rhode Island are exposed to second-hand smoke in the home, or over 50,000 young people.

We recently participated in a study that was published a few months ago that looked at smoking in the workplace. As was previously said, the majority of workplaces have policies. But we found

a lot of differential in terms of what types of companies have them with the blue collar and service industry least likely to have a policy restricting smoking.

We found that the occupational group least likely to have a smoke-free policy were food service workers, such as waiters and waitresses, cooks, and bartenders. Of these 5.5 million food service workers, 22 percent are teenagers. So we're not only dealing with occupational exposure, but also a teen issue.

There are a number of things the Federal Government can do, related to your comments earlier and questions, to reduce second-hand smoke exposure. They fit well into a broader framework of preventing tobacco use. And media and education is really at the top of the list.

We have produced some spots in the past on environmental tobacco smoke, exposure in the home and restaurants and workplaces similar to what Dr. Connolly showed you. The problem is, at a Federal level, we don't have the dollars to pay for the placement of these ads. We have to rely on public service announcements and networks placing these ads.

One ad we had of kid exposure, a child around his father smoking, the ad won an award competing against all other ads. The problem is, it was never really shown because we didn't have the money to place it. So one of the issues clearly is funding counter-advertising campaigns, whether it's for ETS or other areas around tobacco.

The issue of SIDS was brought up earlier. The data are really sound on tobacco smoke increasing the risk of SIDS, both from maternal smoking while pregnant, it doubles the risk, then if the mother continues to smoke after birth, it triples the risk. So the risk of SIDS is affected both by maternal smoking and ETS exposure.

We've also published work looking at casino workers. This came out in 1996, where we looked at a Bally casino in Atlantic City. We looked at the level of cotinine exposure among the workers in the gaming area. We found they had 50 percent higher levels of exposure to ETS than comparable workers that were not in the casino.

So there is good evidence that the hospitality industry has levels of exposure that are significant, actually higher than general workers.

Last, let me just comment that again, in terms of Federal effort, I think the real key issue is that whatever you do in Congress, that it should serve as a floor rather than a ceiling. We really need to endeavor not to preempt stronger State and local action. I think Massachusetts is a perfect example of that.

In conclusion, please remember that the harm caused by passive smoke is inflicted on those who have decided not to smoke, or in the case of young children, those who cannot make an informed decision. Even one preventable death among Americans who have decided not to smoke should be considered unacceptable.

Thank you, Senator.

Senator CHAFEE. What age does a child's risk grow to be no more than that of an adult? In other words, we know that in young children, it's extremely dangerous. At what age are they no more at

risk than an adult from second-hand smoke? Roughly. I'm just curious.

Dr. ERIKSEN. I would assume that the increased risk with kids is because of the developmental nature of their lungs. When a kid gets into adolescence, it's probably less of a factor than it was earlier in life. But then they start to get introduced to the issue of smoking themselves.

Senator CHAFEE. But what age would you say? Would you say once a child reaches 15, they are probably at no greater risk than an adult? I don't know whether that's accurate or not.

Dr. CONNOLLY. For respiratory distress syndrome, or respiratory diseases, zero to two is the high risk group, that is for hospitalization from pneumonia or bronchitis. I think for asthma, if a child has asthma, it's going to be equal risk for asthmatic attack.

Dr. Jeneric's work out of Yale, I think, found a very disturbing finding, and that is, children who grew up in a home with adult smokers, showed a risk for lung cancer later in life. Somehow those lungs were affected and the risk for lung cancer from second-hand smoke persisted.

Senator CHAFEE. I'm going to ask one question and ask each of you to answer it, and rather briefly.

As you know, you've been sitting here right from when we started, and I have grave concerns as to what the Federal Government can do, more than provide money, possibly, to help the local effort, to do the advertising, to try the persuasive, educational approach. What else would you suggest we do, taking into consideration, for example, the suggestion, as the Attorneys General had, that OSHA have this enforcement in every building in the United States where either it would be smoke-free, or when it's visited by 10 or more people in any 1 day, must ban smoking?

What do you think we ought to do?

Dr. CONNOLLY. I would like to see Federal resources given to States and communities to enforce local laws prohibiting second-hand smoke. I think it's best dealt with at the community or State level. I think the Federal Government could adopt minimum standards, but then allow the States to go further.

I think at the same time——

Senator CHAFEE. But when you say adopt minimal standards, give me an example of what you might mean by that. If the State says, oh, great, the Federal Government has adopted these standards, let them enforce them. Let's say we adopt minimum standards, let's say, no smoking in every building that's visited by more than 10 people a day has to have a smoke-free room? Would that be an example?

Dr. CONNOLLY. That would be a minimal standard, but I think it's best enforced at the local level. We have adopted a policy of having the local community effect the social norms by passing laws and enforcing laws against second-hand smoke. And it's worked. That would be my response.

Senator CHAFEE. Doctor.

Dr. ERIKSEN. I would agree. I think that the minimum standard as described in the Attorneys' General bill and some of the legislation is an appropriate role for the Federal Government. We feel, in addition to that standard, that hospitality workers should not be

exempted, just from an epidemiologic standard, that their risk is higher. We can't, from a public health standpoint, exempt them.

Senator CHAFEE. The Attorneys General exempted bars and restaurants. You wouldn't do that?

Dr. ERIKSEN. Right. What we're thinking is it should be phased in. It should be not the same timeframe, but it should be phased in over time.

But going with what Dr. Connolly said, and what you suggested yourself, is that this needs to be supported by money for educational campaigns and the enforcement should be done locally. The community should be in control.

The other thing to remember is not to preempt States from taking steps.

Senator CHAFEE. I think we all agree. In other words, if a State wants to get tougher, that's its business.

General what do you say?

Ms. STOVALL. Absolutely no preemption. Money to help enforce is really critical, and that's what we envision coming out of the settlement, so that States and local units of government can do enforcement, but to have the Feds set the minimum level of what's acceptable.

Senator CHAFEE. The problem of the minimum level that's acceptable, you get into so-called unfunded mandate. Let's say we should pass a law here. Every building, every State must, the minimum standard is every building in every State that is visited by 10 or more people any day of the week must either ban smoking or have a separate smoking room. So we do that.

And Montana says, well, so what. Go ahead and enforce it if you want to do that. What would you suggest we do, we, the Federal Government? We set a standard like that, then what?

Ms. STOVALL. And if Montana officials refuse to enforce it, then it would be up to officials with OSHA to enforce it. Most States, many States are very eager and want to be sure and protect the rights of States to enforce any of these measures and didn't want to give it up to the Feds. So I don't know necessarily that it's a problem.

Senator CHAFEE. I suppose that if we have an inducement in there, a carrot rather than a stick, if we say that any State that enacts legislation to do this, we will provide them X dollars, or X times, X dollars per person in the State, California obviously getting more than Rhode Island.

Well, OK, now what about bars and restaurants? What would you say to that? Each of you, quickly, what would you say? Your provision exempted them.

Ms. STOVALL. It did, just as a matter, because it was a settlement and we had to have something that's rational. If you look at what's happened across the country, only two States have totally banned smoking in restaurants and those kinds of facilities. Twenty-nine have restricted, pursuant to terms like what's in the agreement.

So from a reasonable standpoint, our agreement still has that provision in it. We're not wedded to that. Anything that the Feds make stronger or harsher is something that most of us go along with, Senator.

Senator CHAFEE. Doctor.

Dr. ERIKSEN. Because of the higher exposure in these workers, I think we need to address it, but I think we can do it creatively. Either in terms of a phased-in approach, or providing incentives to States to deal with this when they're ready to, clearly making it in their interest to protect their hospitality employees. So I think we need to address it, but we should look at it creatively.

Dr. CONNOLLY. The highest rate of lung cancer by occupation in Massachusetts is among bar and restaurant workers. Fifty percent greater than the general population, or attributable to behavior. They have to be protected.

I would argue we do a phase-in. In Massachusetts, we have bans now covering about 40 percent of our population. When we look at the bans, and their impact on economic business, where there was a ban, we saw more business in the restaurant where there was no ban.

I would also support a phased-in approach, first doing restaurants only and possibly phase in bars in the future.

Senator CHAFEE. Well, thank you all very much. It is impressive what each of you have accomplished. We appreciate having you.

Dr. ERIKSEN. Senator, just one quick comment. One of the issues I think is important that we haven't addressed, and it's in my written testimony, but when the tobacco industry settled with the flight attendants, they agreed to support Federal legislation that would ban smoking on all flights, internationally, that either landed, took off or stopped in the United States. But no such legislation has been forthcoming.

So I encourage you to consider as you go forward to put this provision that the tobacco industry said they would support if there was Federal legislation, so we could expand the domestic ban on flights, all international flights, by Federal statute. Take them up on their offer, it would be a great help.

Senator CHAFEE. That's a constructive thought.

All right, fine, thank you all very, very much.

Dr. Munzer, past president, American Lung Association; Mr. Lemons, president, Building Owners Managers Association of Boston; and Michael Sternberg, on behalf of the National Restaurant Association. If you gentlemen will come, we'll move right along here. We'll start with Dr. Munzer.

STATEMENT OF DR. ALFRED MUNZER, M.D., PAST PRESIDENT, AMERICAN LUNG ASSOCIATION; DIRECTOR, CRITICAL CARE AND PULMONARY MEDICINE, WASHINGTON ADVENTIST HOSPITAL

Dr. MUNZER. Mr. Chairman, I'm Dr. Alfred Munzer, Past President of the American Lung Association, and Director of Pulmonary Medicine at Washington Adventist Hospital in Takoma Park, Maryland.

As a pulmonary physician, I see the devastation caused by tobacco on a daily basis. I see men and women with end-stage lung cancer and emphysema, seeking a medical miracle to bring about a cure for their disease. But I also see children who cough and wheeze, as their asthma is made worse by exposure to environmental tobacco smoke, or involuntary smoking.

Mr. Chairman, involuntary exposure to tobacco smoke is a public health threat, and all workers, including those in the hospitality industry, and all members of the general public, must be protected. State and local governments must retain the right to enact even stronger tobacco control legislation.

The American Lung Association has consistently opposed the sweetheart deal negotiated by the Attorneys General with the tobacco industry last June. We will oppose any legislation that grants special protections, such as immunity or caps on liability, to the industry.

But today, I want to make three points I hope the committee will consider in legislation. First, public health requires that environmental tobacco smoke be addressed. Environmental tobacco smoke is a Group A carcinogen, like asbestos, benzene, and radon. It is responsible for 3,000 lung cancer deaths every year, and it increases the risk of deep chest infections like bronchitis and pneumonia, not just in children, but also in adults.

It also not only causes exacerbations of asthma in children, but also is one of the few clearly identified causative factors for the development of asthma in children. It probably causes between 8,000 and 26,000 new cases of asthma every year in children.

You've also heard about the danger of environmental smoke as a risk factor in Sudden Infant Death Syndrome. Clearly, environmental tobacco smoke represents an overwhelming public health threat. The data against environmental tobacco smoke has been developed on a sound, scientific basis that more than adequately supports the conclusions of the Environmental Protection Agency about the dangers of environmental tobacco smoke.

In contrast to assertions made by the tobacco industry, the diverse methodology used in the variety of studies that are available only increases the validity of this research. But once again, the scientific basis for the elimination of the ETS threat has come under attack. An as yet unpublished study of environmental tobacco smoke conducted by the International Agency for Research on Cancer is being touted as showing no risk. The World Health Organization has been accused of suppressing this study. That assertion is false.

The organization has issued a statement which states that the study in fact did show an increase of 16 percent in the risk of lung cancer for non-smoking spouses of smokers, and a 17 percent increase for exposure to passive smoke at the workplace. This study was conducted in 12 centers in seven European countries, including 660 cases of lung cancer, and 1,542 controls.

Because this was still a small sample and because smoking is so prevalent in Europe, the study did not reach statistical significance. But the conclusion is very clear, it is consistent with all the other studies that have shown that passive smoking does cause lung cancer.

The second point I would like to stress is that everyone should be protected from environmental tobacco smoke. That includes workers in the hospitality industry, as I indicated before. The American Lung Association urges you to look at the report of the Koop-Kessler Commission for guidance in setting policy on environ-

mental tobacco smoke and on development of a national tobacco control policy.

The third point that I'd like to make is that there should be no preemption in any piece of Federal legislation on tobacco smoke in relation to environmental tobacco smoke. States and localities have shown tremendous creativity in addressing the problem of environmental tobacco smoke, and they should be allowed to continue to do so.

Finally, and perhaps most importantly, a smoke-free environment reinforces the message we all want to send our kids not to start smoking and to quit before it's too late. Thank you.

Senator CHAFEE. Thank you very much, Doctor.

And now Mr. Lemons.

**STATEMENT OF ROBERT K. LEMONS, THE BUILDING OWNERS
AND MANAGERS ASSOCIATION INTERNATIONAL**

Mr. LEMONS. Good afternoon, Mr. Chairman.

My name is Robert Lemons and I'm president of the Building Owners and Managers Association of Boston. This association is also known as BOMA. I'm also a senior vice president and principal of Spaulding and Slye, which is a comprehensive real estate services firm.

Today I am here representing our national association, BOMA International, which is North America's largest and oldest trade association exclusively representing the office building industry.

Our 16,000 members own or manage over 6 billion square feet of commercial property.

Thank you for the opportunity to testify here today, and we commend you for your leadership in addressing this important issue of smoking indoors.

BOMA has a strong concern about second-hand smoke in buildings. Most Americans spend the majority of their day indoors, and building owners and managers have a responsibility to their tenants to provide a healthy indoor environment.

The health risks posed by second-hand smoke are beyond dispute. Since 1993, it has been classified as a Group A carcinogen by the EPA, which concluded that second-hand smoke causes as many as 3,000 deaths from lung cancer each year.

Clearly, steps are needed to protect office building tenants, their employees, guests are clients who may be exposed to this known carcinogen. BOMA International believes that the most effective course of action is to prevent the contaminants from being introduced into the workplace in the first place. Second-hand smoke is a leading contributor to indoor air pollution, and a ban on smoking in the workplace would significantly improve the quality of air that we breathe.

Title IV of the proposed tobacco industry settlement offers a responsible means for achieving this goal, and it reflects the same approaches taken in the Smoke-Free Environment Act legislation introduced by Senator Frank Lautenberg. BOMA International has strongly supported the Smoke-Free Environment Act since it was first introduced in the 103d Congress. In fact, we were the first national real estate organization to adopt a resolution calling for a Federal ban on smoking in the workplace.

Many building owners have already chosen to ban or limit smoking within their properties, even if their particular State, county or municipality has not yet made it mandatory. In a survey that BOMA International conducted last year for our publication *Cleaning Makes Sense*, we learned that 68 percent of the respondents prohibit smoking inside their building, and 29 percent limit it to tenant suites. Only 1 percent of the respondents allow smoking anywhere in their building.

Because of the health and liability concerns associated with second-hand smoke, the ideal course of action is to eliminate smoking in buildings completely. Experience indicates, however, that some tenants may want their employees to be able to smoke within their leased premises. The solution may be for the parties involved to agree to the creation of a separate, designated area, exhausted directly to the outdoors and maintained under negative pressure.

BOMA recommends that in developing legislative language to implement title IV, the Environment and Public Works Committee incorporate S. 826. In particular, we draw your attention to the issue of which entities are responsible for administering the smoking ban in buildings. In multi-tenanted buildings, it is reasonable to expect the property owner or manager to implement a smoking ban in common areas of the building. Similarly, it is reasonable to expect the tenants themselves to administer a smoking ban within their own leased premises.

Building management will take the necessary steps to implement a smoking ban and educate tenants. However, we cannot take responsibility for building occupants who refuse to comply with the ban. If an individual chooses to smoke in violation of the ban, the property's owner or manager should not be held liable, since that person is not under their direct control.

To summarize, the removal of second-hand smoke would protect building occupants by eliminating a recognized source of indoor air quality problems, a fire safety hazard and a liability concern for owners and tenants alike. BOMA will continue to do everything we can to reduce and ideally eliminate the threat posed by second-hand smoke in commercial buildings.

Mr. Chairman, we thank you for your interest in this issue, and in our recommendations for legislative language to make the proposed smoking ban a reality.

Senator CHAFEE. Well, thank you very much, Mr. Lemons. That's very helpful.

Now Mr. Sternberg, on behalf of the National Restaurant Association.

**STATEMENT OF MICHAEL STERNBERG, ON BEHALF OF THE
NATIONAL RESTAURANT ASSOCIATION**

Mr. STERNBERG. Good afternoon, Mr. Chairman, and thank you. My name is Michael Sternberg, and I am the owner and operator of Sam and Harry's Restaurant in downtown Washington, DC and at Tyson's Corner. I also own Harry's Tap Room in Tyson's Corner, and Music City Roadhouse in Georgetown.

I am also a board member of the National Restaurant Association, and it is on their behalf that I appear here today. I would like

to thank you for allowing me to testify on the subject of environmental tobacco smoke.

Smoking is an emotional issue, but I hope we can set aside emotions today and look at this issue from a logical standpoint. Simply put, I believe that restaurateurs like myself and not the Government should be making the decisions that impact our businesses. I have been in the restaurant business for over 20 years. I would not be in business if I offered my customer something they did not want.

A perfect example is what happened when we opened Music City Roadhouse. When we first opened, we decided to devote one entire bar to smoking and one entire bar to non-smoking customers. Today, we don't have separate bars for one simple reason. No one wanted to sit at the non-smoking bar, and I can't afford to keep a bar open, stocked, and staffed that no one wants to patronize.

Similarly, we have attempted to cater to both our smoking and non-smoking customers by making a very substantial investment of time and money in an air filtering system for the new Sam and Harry's as well as in the original Sam and Harry's in Tyson's Corner and Washington, DC. We undertook all kinds of studies and hired the experts to help us ensure that smokers and non-smokers alike are enjoying the dining experience of their own choosing.

We spent nearly \$50,000 to make it work. This may be much more than the normal startup business can afford.

If a restaurateur attracts customers to his or her restaurants that don't smoke and don't like to be around tobacco smoke, then it makes sense that the restaurateur would ban smoking from all or part of his or her establishment. But if that restaurateur has a clientele whose majority consists of smokers, then it would be foolish for him or her to ban smoking entirely from the establishment.

You see, by their very nature, restaurants are in the business of offering choices to their patrons. Every effort is made to ensure that the dining experience is enjoyable. To that end, many members of the National Restaurant Association have elected to ban smoking from their establishments, while most others have provided a separate section for smokers and non-smokers. It's a choice and it's one that should be left to the individual restaurateur.

While reducing smoking is a laudable goal, the difficulty when it comes to the restaurant industry is where to draw the line. One suggested approach has been to ban smoking in fast food restaurants. But can those places be defined in a way that does not include barbecue restaurants and others who happen to serve customers by way of a take-away counter?

Another approach has been to ban smoking in restaurants, but to exclude areas that serve as bars, an approach that could lead to many more liquor licenses being in demand. Still another approach being considered would ban smoking except in the tiniest bars, essentially allowing smoking only in the most restricted of spaces. Another approach has been for Congress to force the Occupational Health and Safety Administration to make the decision by promulgating its final rule on indoor air quality.

Defining the industry on where to draw the line is difficult. Again, we say leave it to the restaurant owner and his or her customers to decide.

My final point I wish to make is to cite the impact on smoking on travel and tourism. Restaurants account for the single largest industry among the tourism industries. We represent nearly 800,000 eating and drinking establishments and food service institutions. Of these establishments, approximately 400,000 are restaurants and roughly 250,000 of those are single, independent operators. You can say we are a large industry dominated by small businesses.

We would not survive and thrive if it were not for the business that is generated by tourism. Indeed, I operate my restaurants in a city that is well-recognized for tourism.

Last year, the United States hosted a record 24.2 million overseas visitors, a 7 percent increase over 1996, according to the U.S. Commerce Department. Tourism is one of the Nation's largest exports, contributing nearly \$79 billion to the U.S. economy.

At a time when we are asking tourists to come to the United States to spend their hard-earned vacation money, or come here as business travelers, we are discouraging them with our smoking policies. This is inconsistent, and we believe it will cause a loss of jobs for tourism industries like the restaurant industry and a loss of tourism dollars for the Nation's economy.

We believe, Mr. Chairman, that the market is working as it should to determine individual restaurant smoking policies. No blanket Government directive is needed. This is particularly true, since it is individual citizens who decide which restaurants to frequent. They are free to choose restaurants that reflect their own taste with regard to food, ambience, convenience, as well as smoking policy.

Thank you again for giving me the opportunity to appear before you today.

Senator CHAFEE. Well, thank you very much, Mr. Sternberg. As you know, you've been here and you've seen how I've got reservations about just how to proceed in all of this.

What do you say to the argument that it isn't the customer who is going to be affected in your restaurant, not so much in your restaurants, in restaurants where smoking is permitted, but the person who really suffers is the waitress or the bartender or waiter that's there? And as you know, the whole theory of OSHA and so forth is for the employee to be protected, whether it's from toxic materials or whatever it might be.

So what do we do about that situation?

Mr. STERNBERG. Well, Mr. Chairman, I sort of anticipated that question. The answer is relatively simple. There is no smoking allowed in our kitchens, there is no smoking, obviously, allowed in our non-smoking areas. There is no smoking allowed in the employees locker room and spaces such as those.

If an employee came to me, now, as it happens 99 percent of my work staff smokes. Most of them smoke.

Senator CHAFEE. Maybe in self-defense.

Mr. STERNBERG. It may be an education. But I would say that if somebody came to me, if one of my employees came to me and obviously in any industry, retaining employees is very, very important, if an employee came to me and said, Michael, I can't work in this environment, it's too smoky, I would make sure that their

work environment, that they were always assigned to the non-smoking areas.

So if it was an important issue to them, we would make every effort to accommodate their needs.

Senator CHAFEE. Well, I think I can understand that.

Mr. Lemons, I thought you had some good points there. You heard Mr. Connolly talk about the success they've had in Massachusetts. Well, are you based in Massachusetts?

Mr. LEMONS. I am based in Massachusetts, yes.

Senator CHAFEE. Is that where BOMA is headquartered?

Mr. LEMONS. No, I'm the president of BOMA, the Boston chapter. I'm here representing the National Association.

Senator CHAFEE. I see. So you've seen the effect of the ads that Massachusetts has run, and the different education efforts they've made up there.

Mr. LEMONS. I have. I've learned myself.

Senator CHAFEE. It seems to me they are rather effective. What do you think?

Mr. LEMONS. I would agree that they are effective. The programs for our employees in Massachusetts today are very effective at both cutting down the smoking and enforcing the non-smoking. There is a tremendous voluntary program underway because of that education.

Senator CHAFEE. Now, Dr. Munzer, you came on strong, and from your background as head of the American Lung Association and as a physician. But what do you think of the worries I've voiced here about the U.S. Government trying to police every building in the country? It just seems like a very difficult job for us. What do you say to that?

Dr. MUNZER. Well, the American Lung Association supports the approach that has been taken by Senator Lautenberg in this regard. We believe that there is a Federal role for setting minimum standards of safety for all workers throughout the country and for the general public. In most instances, these laws have been really self-enforcing. There are also a lot of other standards that we set on buildings, and this would just be one additional standard, a smoke-free environment.

So we do not believe that policing is going to be an overwhelming problem.

Senator CHAFEE. I'm not sure there are many Federal requirements as far as buildings go. I suppose you could talk about the Americans With Disabilities Act. What other things, Mr. Lemons, where does the Federal Government get into your business?

Mr. LEMONS. With codes and regulations, the Americans With Disabilities Act is an excellent example, probably the most recent. But beyond that, it would be all the codes and regulations.

Senator CHAFEE. But are those Federal codes or are those—

Mr. LEMONS. There are minimums that are established, then each city, municipality or State has tighter regulations.

Senator CHAFEE. So, Dr. Munzer, you think we ought to go ahead with—I'm not exactly sure what Senator Lautenberg has proposed. What has he proposed?

Dr. MUNZER. Well, it basically follows very close to the language that you discussed earlier, a ban on smoking in buildings that have

10 visitors a day. But in addition to that, he allows for no exemptions and no preemption of any Federal statute.

Senator CHAFEE. I think we all agree on no preemptions by the Federal statute. We're not going to argue with that. By that, we would say that if the States want to get tougher, that's their business.

Dr. MUNZER. Exactly.

Senator CHAFEE. I don't see any problem with that. But I am just—I like the goal of obviously curbing smoking everywhere. Like many, many people's children, my children in their college days were waiters and waitresses in bars or restaurants. And I worried about them being in smoky areas.

But they weren't there for life, and weren't there constantly working. So this is a group we care about, just like you care about your employees.

Dr. MUNZER. One additional point regarding what you just said. It's very important that children be brought up in a smoke-free environment, not just in the home. I think as long as children perceive that there is a smoking environment and smoking is acceptable, and if smoking is acceptable, they will start smoking themselves. We'll have our next generation of smokers.

So I think we have to take a long view on this. If we're going to create a smoke-free society, we also have to have a smoke-free environment.

Senator CHAFEE. Well, there's no question what you say, the normalization of smoking in some of the ads that takes place, the Marlboro man and so forth, hopefully in connection with the legislation we're working on now, that can be eliminated.

But there's another side to this. I was with my grandchildren the other day, and they're about nine. They saw somebody smoking, were just absolutely horrified by such outrageous conduct, they were going up to chastise the individual. But he was bigger than I was, so I urged them not to.

Ok, fine, thank everybody for coming. We appreciate it, and appreciate you, Mr. Lemons, coming from Massachusetts. Others came from a distance, Dr. Connolly, and the attorney general came all the way from Kansas. We're very grateful to you, General Stovall, for making the trip. You've been very helpful. Thank you.

[Whereupon, at 3:43 p.m., the committee was adjourned, to reconvene at the call of the chair.]

[Additional statements submitted for the record follow:]

PREPARED STATEMENT OF CAROL M. BROWNER, ADMINISTRATOR,
ENVIRONMENTAL PROTECTION AGENCY

Good morning, Mr. Chairman and Members of the Committee. I am very pleased to be here today to present testimony on one of the most important issues EPA deals with, the very serious health risk posed by the widespread and completely preventable exposure of our children and other members of the public to secondhand tobacco smoke.

As you know Mr. Chairman, in January 1993, the Environmental Protection Agency (EPA) published a landmark report on the respiratory health risks of passive smoking, entitled Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders. This report was issued under the authority of The Radon Gas and Indoor Air Quality Research Act of 1986, which directs EPA to conduct research and disseminate information on all aspects of indoor air quality. The report summarized the findings of the Agency's extensive investigation of the respiratory health risks from exposure to environmental tobacco smoke (ETS). It incorporated com-

ments and recommendations from the public as well as two reviews by EPA's Science Advisory Board (SAB), a panel of independent scientific experts in this field. The Science Advisory Board unanimously endorsed both the conclusions of the report and the methodologies employed. The Department of Health and Human Services (HHS) has endorsed the report and the National Cancer Institute within HHS has printed it as one of their series of scientific monographs.

Based on the total weight of the available scientific evidence, EPA concluded that the widespread exposure to secondhand smoke in the United States presents a serious and substantial public health risk. I'd like to briefly summarize the findings of the report.

One of the most significant conclusions of the report—and certainly the one that has received the most attention—is the finding that secondhand smoke is a human lung carcinogen, classified as a “Group A” carcinogen under EPA's carcinogen assessment guidance. This classification is reserved for those compounds or mixtures that have the strongest evidence of a cause-and-effect relationship in humans. In the case of secondhand smoke, unlike any other compound the Agency has ever evaluated, we are able to see a consistent increase in lung cancer risk at actual environmental levels, rather than having to extrapolate downward from very high occupational exposures as we have had to do for such other Group A carcinogens as asbestos and benzene. In attempting to quantify the extent of the lung cancer risk, the report estimated that secondhand smoke may be responsible for approximately 3,000 lung cancer deaths annually in non-smokers in the United States. Of these 3,000, the report estimated that approximately 2,200 are attributable to exposure outside the home.

ETS also has other effects on the respiratory health of adult non-smokers. These include coughing, phlegm production, chest discomfort, and reduced lung function.

The finding that secondhand smoke is capable of causing lung cancer in healthy adults has received the most public attention and is of great concern from a public health standpoint. However, the very serious respiratory effects on young children that are documented in our report are also of great personal concern to me. The report found that young children are particularly sensitive to the effects of secondhand smoke.

Infants and young children who are exposed to secondhand smoke are at increased risk of lower respiratory tract infections such as pneumonia and bronchitis. EPA estimated that each year between 150,000 and 300,000 cases of lower respiratory tract infections are associated with exposure of children to secondhand smoke, resulting in between 7,500 and 15,000 hospitalizations.

Asthmatic children are especially at risk. EPA estimated that exposure to secondhand smoke increases the number of episodes and the severity of symptoms for between 200,000 and one million asthmatic children. In addition, passive smoking may increase the risk of developing asthma for otherwise healthy children.

Children who have been regularly exposed to secondhand smoke are also more likely to have reduced lung function and symptoms of respiratory irritation such as cough, excess phlegm, and wheezing. Passive smoking can lead to a buildup of fluid in the middle ear, the most common cause of hospitalization of children for an operation.

As you are probably aware, immediately following publication of our report in 1993, the tobacco industry filed a lawsuit challenging both our authority to conduct the risk assessment as well as some of the scientific findings of the report. While this lawsuit is still not resolved—and we fully expect the court to find for the government on every pending procedural and substantive issue—I think it is particularly telling to note that not one aspect of the report's findings with respect to the serious risks to children was even challenged by the tobacco industry in its lawsuit. In fact, in a full page advertisement in major newspapers across the country, one of the major tobacco companies directly acknowledged that young children should not be exposed to secondhand smoke.

Since publication of our report in early 1993, the evidence that secondhand smoke presents a very serious and completely preventable risk to our Nation's children has grown even stronger. A number of studies have strengthened the evidence associating secondhand smoke exposure to Sudden Infant Death Syndrome and the onset of asthma in young children. There is also evidence suggesting that passive smoking by mothers during pregnancy increases the risk of reduced birth weight in infants.

Because of the health implications of exposure to secondhand smoke documented in our report, EPA recommends a number of actions to prevent involuntary public exposure to secondhand smoke in indoor environments. These recommendations are intended to help parents, decision-makers, and building occupants take steps to protect non-smokers from exposure to secondhand smoke and are outlined in the bro-

chure, What You Can Do About Secondhand Smoke. EPA's primary recommendations are that:

- Residents not smoke in their home or permit others to do so.
- Every organization dealing with children—schools, day care facilities, and other places where children spend time—have a smoking policy that effectively protects children from exposure to environmental tobacco smoke.
- In the workplace, EPA recommends that every company have a smoking policy that effectively protects non-smokers from involuntary exposure to tobacco smoke either through complete bans or limiting smoking to rooms that have been specially designed to prevent smoke from escaping to other areas of the building.
- Employer-supported smoking cessation programs should be a part of any smoking policy.
- If smoking is permitted in a restaurant or bar, placement of smoking areas should be determined with some knowledge of the ventilation characteristics of the space, to minimize non-smoker exposure.

As you are no doubt aware, many Federal agencies, State and local governments and private sector organizations began to implement some form of indoor smoking restrictions as a result of the reports issued in 1986 by the U.S. Surgeon General and the National Research Council of the National Academy of Sciences. In the years since publication of the EPA report, however, we have seen a rapid acceleration of measures to protect non-smokers in a variety of settings, including workplaces, restaurants, sports facilities, health and day-care facilities, shopping centers, and a wide range of other public facilities. Hundreds of state and local ordinances have been passed or introduced in virtually every area of the country since 1991. The National Cancer Institute estimates that as of 1993, 46 percent of all workers reported that their place of employment had a smoke-free workplace policy, while 81.6 percent indicated that their workplace was covered by some type of formal smoking policy. In contrast, only 3 percent of workers were covered by such policies in 1986. In August 1997, the President issued an Executive Order directing that employees and visitors at Federal buildings not be exposed to secondhand smoke.

Despite this encouraging trend, there are many places where involuntary exposure to secondhand smoke still occurs and much work remains to be done. Of greatest concern to EPA is the continued exposure of children to secondhand smoke, particularly in the home. A Centers for Disease Control and Prevention (CDC) study of children's exposure to secondhand smoke—the first such national study—found that in 1991, 31.2 percent of children were exposed to cigarette smoke daily in the home. The study found wide regional, income and education differences. For example, 48 percent of children in homes of low income and education levels were exposed vs. 25 percent in higher level homes. Regionally, almost 40 percent of children in the Midwest were exposed to ETS in their homes, vs. 24 percent of children in California. The study also estimated that children exposed to secondhand smoke daily in the home have 18 million more days of restricted activity, 10 million more days of bed confinement, and miss 7 million more school days than other children. An EPA-funded survey found that approximately 27 percent of children were exposed to secondhand smoke in the home in 1994, indicating that some progress has been made.

As part of EPA's comprehensive program to address risks associated with indoor air pollution, EPA has established an objective—consistent with the Department of Health and Human Services' Healthy People 2000 goal on the same issue—of reducing to 15 percent the number of children regularly exposed to secondhand smoke in the home by the year 2005. While it is our goal over the long term to eliminate our children's exposure to secondhand smoke, we are establishing achievable milestones that will move us closer to our long term goal.

Achieving this objective will be a significant challenge. After years of consistent reductions in the percentage of adults that smoke, the percentage of the population that smokes nationwide has leveled off at about 25 percent of the adult population. As a result, reducing the number of children exposed to secondhand smoke in the home will require us to continue to strive to find effective ways of reaching and educating those adults who do continue to smoke about the detrimental effects secondhand smoke has on their young children.

Of course, while the home may be where children are most exposed to secondhand smoke, there are many other environments in which children spend time—such as day care facilities, schools, and restaurants—that we also cannot ignore.

EPA's strategy is based on development of a broad network of partners and programs designed to help educate parents about the importance of protecting their children's health by keeping their air free of tobacco smoke. EPA coordinates closely with CDC's Office on Smoking and Health on their public information efforts, and we are working with a wide range of State and local government agencies and non-

governmental organizations to educate the public about the hazards of secondhand smoke.

EPA is working with the American Academy of Pediatrics (AAP) to develop and promote materials for use by children's health care providers—and particularly pediatricians—in delivering health messages to parents about the risks of secondhand smoke to their children. The relationship between the pediatrician and the parent is an extremely rich opportunity for education and motivation on crucial environmental health issues. EPA has begun a pilot program, working with the Pennsylvania Chapter of AAP and the National Resource Center for Health and Safety in Child Care, in an effort to enlist day care centers in the effort to protect children from secondhand smoke during day care, as well as to help reach parents at home with this important message. This program consists of a comprehensive continuing education module for day care operators that includes both education and outreach tools as well as requiring a commitment that the day care operator ensure a smoke-free day care environment.

EPA, in collaboration with the Consumer Research Council and the American Medical Association, is also developing a media campaign to develop and distribute public service announcements that will directly reach parents with the message that secondhand smoke is a preventable risk to their children's health and one that they can do something about, even if they don't quit smoking themselves.

EPA is also developing targeted information on secondhand smoke to specific sub-populations where there are significantly higher risks, such as those in households with lower education and income levels.

EPA is also participating in international efforts to address secondhand smoke. In preparation for last year's Denver Summit of the eight major industrialized democracies, I had the honor of hosting a meeting of the Environment Ministers of the Eight that focused on children's environmental health. At that meeting, the Ministers representing the Eight adopted a Declaration on children's environmental health and forwarded it to Denver for consideration by the Leaders at the Summit.

The Environment Ministers called for domestic, bilateral and international efforts to improve the protection of children's health from environmental threats, and specified concrete actions that the Eight will undertake to better protect children from environmental hazards. At the Denver Summit of the Eight, leaders committed their governments to explicitly incorporate children's health issues into environmental risk assessments and standard setting and to work together to strengthen information exchange, provide for microbiologically safe drinking water, and to reduce children's exposure to lead, environmental tobacco smoke, and other air pollutants. While all of the Eight have set standards that protect environmental health generally, recent scientific advances demonstrate that more specific actions must be taken to better address the unique environmental health risks to children. We should explore and investigate potential links between children's health and the environment.

The specific goal regarding ETS is to convene a scientific conference, through the World Health Organization (WHO) or another appropriate scientific organization, to synthesize and share the latest scientific information on risks to infants and children from environmental tobacco smoke and compile information on the most effective educational strategies concerning exposures to children. Planning for this conference is underway with WHO and CDC and we hope to hold it this year.

We must continually strive to find the most compelling messages and the most credible sources for those messages, and continue to develop partnerships with all organizations that are concerned with children's health issues. We have only begun to get the message out and much remains to be done. EPA has a unique role to play in the Federal community in helping to educate the public about the serious health risks of secondhand smoke.

As society as a whole and the Congress in particular continues to debate the details of tobacco control, I am heartened by the fact that a consensus has emerged around the need to effectively discourage children from developing the smoking habit. Surely, if we can agree that children and teenagers should not smoke, we can also agree that they should also not be exposed to secondhand smoke. We clearly recognize the importance of public health education for preventing teenage smoking and encouraging smoking cessation. This in turn will prevent significant childhood exposure to secondhand smoke. And the dividend for the rest of society is that by protecting those who are among the most vulnerable in our society—by ensuring that our kids are safe, by putting them first—we protect everyone.

Thank you for the opportunity to testify before you today. I look forward to working with you, Mr. Chairman, to craft sensible legislation that puts our children's health first. I will be happy to answer any questions that you might have.

PREPARED STATEMENT OF KANSAS ATTORNEY GENERAL CARLA STOVALL

Addressing concerns which arise from environmental tobacco smoke (ETS) and related issues are important components of the June 20 agreement between the Attorneys General and the tobacco companies. Notwithstanding its significance, it is often an overlooked issue because it does not generate the controversy that other provisions do. The Attorneys General appreciate the time this Committee is dedicating to this particular issue and are hopeful that our work on the settlement will be helpful to this Committee as you consider the deadly consequences of environmental tobacco smoke.

As you know, there is no minimum Federal standard governing smoking in public places or in the workplaces of millions of Americans. As a result, nonsmokers are regularly subjected to air which has been contaminated by their smoking friends and colleagues. Is "contamination" too harsh a word to use in this context? Not when we know that tobacco smoke contains more than 4,000 chemical compounds, including 200 known poisons (such as benzene, formaldehyde, and carbon monoxide) and 50 other chemicals which cause cancer in humans and animals. Six years ago the Environmental Protection Agency classified ETS as a Group A carcinogen—a substance with no safe level of exposure.

Environmental tobacco smoke comes from two sources every time a pipe, cigar or cigarette is lit. "Mainstream smoke" is what the smoker exhales after inhaling and once exhaled becomes part of the air nonsmokers breathe. The more dangerous source is called "sidestream smoke." This is what is produced when the tobacco product is burned. A lit cigarette sitting in the ashtray is producing "sidestream smoke," which has even higher concentrations of tar and nicotine than "mainstream smoke" and more cancer causing substances too. This is because the cigarette is burning at a lower temperature when sitting on the ashtray and results in dirtier and less complete combustion because it is not drawn through the cigarette's filter. Thus, the "mainstream smoke" a nonsmoker inhales is more toxic than the filtered direct smoke the smoker breathes.

Americans know all too well how many young men and women this country lost in the entire Vietnam War. We lose almost that many every year to second-hand smoke! Fifty-three thousand nonsmokers die each year from exposure to environmental tobacco smoke! These preventable deaths are caused by heart disease and lung cancer resulting from ETS.

Not everyone who is exposed to ETS dies from its consequences—but prolonged contact with environmental tobacco smoke is detrimental. Infants whose mothers smoke are at an increased risk of dying from Sudden Infant Death Syndrome (SIDS); exposure to second-hand smoke causes between 150,000 and 300,000 respiratory infections in children each year; between 7,500 and 15,000 children are hospitalized each year as the result of respiratory infections caused by ETS; second-hand smoke exacerbates asthma in about 20 percent of children who suffer from asthma; the arteries of nonsmokers exposed to ETS thicken 20 percent faster than in nonsmokers with no ETS exposure; it is linked to cervical cancer, brain tumors, aggravated asthmatic conditions, impaired blood circulation, bronchitis, pneumonia, stinging eyes, sore throats and headaches; and ETS is linked with a 20 percent increase in the acceleration of arteriosclerosis.

Some of the exposure to second-hand smoke occurs in homes across America. Children have parents who smoke. In fact, EPA estimated in 1993 that one-half to two-thirds of all children in the U.S. under six live with a smoker and living with even one smoker increases the risk of lung cancer. Children's exposure to ETS is especially grave because they absorb more nicotine and toxins in their lungs and they breathe more per kilogram of body weight than adults. Nonsmokers married to heavy smokers have 2-3 times the rate of lung cancer as nonsmokers living with nonsmokers. Nonsmoking wives who were married to smokers have a 30 percent increased risk of lung cancer as do nonsmoking wives with nonsmoking husbands. Nonsmokers exposed to 20 cigarettes a day have twice the risk of developing lung cancer. The Attorneys General never intended to ask the Federal Government—or state governments—to regulate these situations. While gravely affecting the health of the nonsmokers, smoking in private homes was never at issue.

What is at issue, however, is the exposure to environmental smoke which occurs in public facilities or the workplace. Approximately 80 percent of nonsmokers' exposure to ETS occurs in the workplace! OSHA has estimated that between 14 million and 36 million nonsmokers are exposed to ETS at work. The Center for Disease Control has determined that workers exposed to ETS have a 34 percent higher risk of lung cancer than those who work in smoke-free facilities.

Workers in a smoking facility are not the only ones that these provisions would protect. Customers or patrons of the establishment would also benefit. This is im-

portant when we consider that the U.S. Surgeon General has estimated 800,000 children are exposed to ETS at their schools and daycare facilities.

For these reasons, the Attorneys General proposed strong requirements to minimize the exposure of nonsmokers to environmental tobacco smoke. The provisions would:

- Restrict indoor smoking in public facilities (i.e., any building regularly entered by ten or more individuals at least 1 day per week) to ventilated areas with systems that—

- exhaust air directly outside;
- maintain the smoking area at “negative pressure;”
- do not recirculate the air inside the public facility;

- Ensure no employees would be required to enter a designated smoking area while smoking is occurring;

- * Exempt restaurants (except “fast food” restaurants), bars, private clubs, hotel guest rooms, casinos, bingo parlors, tobacco merchants and prisons;

- * Direct OSHA to issue regulations implementing and enforcing the standard within 1 year of the legislation. Enforcement costs would be paid from industry payments pursuant to the settlement agreement and Federal legislation.

As envisioned by the Attorneys General, the legislation regarding environmental tobacco smoke would not preempt any state or local restriction equal to or stricter than this standard. It would not affect any Federal rules restricting smoking in Federal facilities.

While the Federal Government has the authority under current law to implement regulations having the same outcome as this standard, the practical matter is that no such regulations exist. OSHA has a proposed rule that was drafted over 4 years ago. The agency conducted more than 6 months of hearings which ended 2 years ago—and, yet, we still have no final regulation in existence. I have been told that a final regulation is still at least 4 years away!

Including this ETS standard in Federal legislation currently being considered means we could put on an express track the protection of nonsmokers in their working environments and in public places. In the four additional years that would be required for the OSHA regulation to be issued, another 212,000 nonsmoking Americans will die. And approximately 80 percent, or 169,600, will be from the exposure to the smoke from their coworkers. We cannot afford to wait!

There is nothing revolutionary in this proposal. As of 1993, 45 states and the District of Columbia restricted smoking in public places. Forty-four states and the District have legislation which addresses smoking in public workplaces and twenty-three which address it in private workplaces. In 1994, the Department of Defense, the largest employer in the U.S. with nearly 3 million employees, banned smoking in all DoD facilities worldwide. In 1991, a survey of 833 companies was undertaken and found 85 percent had adopted a policy restricting smoking. And U.S. flights of 6 hours or less ban smoking. We have been heading in the right direction for years now. This agreement gives U.S. the impetus to take the final step and uniformly and consistently restrict smoking in public places.

The provisions of the June 20 agreement on ETS are modeled extensively after the provisions in Congressman Henry Waxman’s 1994 bill which was voted out of Committee. They do, however, provide exemptions (e.g., restaurants, bars) which his current bill, H.R. 1771, does not. The provisions hammered out at the negotiating table last spring and summer were approved by the Attorneys General, of course, but also by the tobacco companies without objection.

Understandably, business owners may have reservations about the financial impact of such regulation. There is nothing in this standard which requires expensive retrofitting or renovation. I have heard that opponents estimate this will cost American businesses \$70 billion. We have seen nothing which would substantiate such a calculation. To avoid any cost at all associated with this provision, a business owner could maintain a smoke free environment. But if he/she chose to allow a smoking area within the business, the smoking area simply has to be vented to the outside. No fancy filters or cleaning devices. This standard is comparable to what hundreds and hundreds of cities across America have already implemented without considerable expense or obstacles to business owners.

As a matter of fact, cost savings would be realized which could offset any expense a business owner undertakes to comply with this standard. Businesses which currently allow smoking incur an average of \$500 per smoker annually for property maintenance and cleaning costs. In addition to those expenses, are the lost-productivity costs of exposing employees to environmental tobacco smoke. On a generalized scale, EPA estimates that the elimination of exposure to ETS in the workplace would result in savings between \$35 and \$66 billion annually by the avoidance of illness and premature deaths.

Certain businesses worry that smoking restrictions or a total smoking ban would cause a reduction in customers. Restaurants most notably voice this concern. But a study published in the American Journal of Public Health compared 15 cities that prohibited smoking in restaurants with 15 cities that had no such prohibition. No significant economic impact was demonstrated.

Other studies show that smokers do not avoid smoke-free locations. In another look at the issue, forty convention groups were surveyed to determine whether they would be dissuaded from booking in a smoke-free facility. Only the group representing the tobacco industry found that a controlling factor. Another study published in the American Journal of Public Health found that 90 percent of patrons would maintain or increase Use of restaurants if they became smokefree and 89 percent would maintain or increase their patronage at bars and clubs. Smokers made up 68 percent and 56 percent, respectively, of those totals.

Public support for these restrictions is overwhelming. Almost 80 percent of Americans believe there should be restrictions on smoking in public places; eight out of 10 nonsmokers are annoyed by second-hand smoke; and 90 percent of adults believe people have the right to breathe smokefree air.

The Attorneys General believe this is a reasonable proposal which would provide critical protection to nonsmokers, while still giving flexibility to business owners. The proposal does not create something unheard of prior to June 20—it merely builds upon the trend this country has seen during the last decade. The proposal acknowledges the serious health risks of environmental tobacco smoke and takes measured steps to reduce the unnecessary and preventable loss of life.

Thank you for the opportunity to present the view of the Attorneys General on this important issue.

(Sources for this testimony include publications by the American Lung Association, the American Cancer Society, ENACT, and "Tobacco: Biology and Politics," by Stanton A. Glantz. Copies can be made available upon request of the Committee members.)

PREPARED STATEMENT OF GREGORY N. CONNOLLY, D.M.D., M.P.H. DIRECTOR,
MASSACHUSETTS TOBACCO CONTROL PROGRAM

DESCRIPTION OF THE PROBLEM

Second-hand smoke is the third leading cause of preventable death in the United States of America. Second-hand smoke results in an estimated 53,000 premature deaths each year. 37,000 from heart disease, 3,700 from lung cancer and 12,000 from other forms of cancer. Only active smoking (420,000 deaths per year) and alcohol (100,000 deaths per year) result in more deaths. The health effects of second-hand smoke has been reviewed extensively in scientific literature. There are more than 3,000 scientific articles on environmental tobacco smoke. These articles have been summarized in a series of reports done by the Surgeon General, the National Research Council, the Environmental Protection Agency, and most recently by the California Environmental Protection Agency. Just last week new evidence showed that ETS damages the cardiovascular system of exposed non-smokers.

Each year in the United States second-hand smoke causes the following:

- 53,000 deaths among adults from heart disease, lung cancer, cervical cancer and nasal sinus cancers.
- 8,000–26,000 new cases of asthma among children.
- 150,000–300,000 cases of lower respiratory track infections in infants.
- 7,500–15,000 hospitalizations for lower respiratory track infections in infants.
- 140–210 infant deaths from lower respiratory track infections.
- 200,000–1,000,000 asthma attacks through exacerbation of asthma symptoms among children.
- 250,000–2.2 million middle ear infections in infants and children.
- 1,900–2,700 deaths from Sudden Infant Death Syndrome (SIDS).
- 9,700–19,000 cases of low birthweight due to second-hand smoke during pregnancy.

ENVIRONMENTAL TOBACCO SMOKE AND THE PROPOSED NATIONAL SETTLEMENT

The proposed tobacco settlement provides a minimum standard governing smoking in public places and workplaces by permitting smoking only in separately ventilated areas. It also authorizes OSHA to promulgate regulations and report these standards. However, the settlement exempts restaurants (except fast food restaurants), bars, private clubs, hotel rooms, casinos, bingo parlors, tobacco merchants and prisons. The latter are public areas that have some of the highest levels of sec-

ond-hand smoke exposure of any public place and pose significant risks to exposed workers.

Drs. Koop-Kessler, in reporting on the settlement, have made a series of recommendations to strengthen the settlement's provisions for involuntary exposure to environmental tobacco smoke. The report calls for total prohibition of smoking in all worksites and all places of public assembly. It also calls for state and local measures prohibiting smoking in all worksites including public awareness campaigns related to the health effects of ETS exposure. The report calls for a complete risk assessment of cardiovascular effects associated with environmental tobacco smoke and the development of economic incentives for business to encourage smoke-free worksites. Finally, the report calls for adequate funding of a public education program about the dangers on ETS.

THE MASSACHUSETTS APPROACH TO CURBING ETS

In 1992, the Massachusetts Division of the American Cancer Society placed a ballot question on the state's ballot to raise the cigarette tax 25¢, and allocate a portion of those funds for a comprehensive tobacco control campaign. The ballot question passed 56 percent-44 percent, and in the fall of 1993, the state Department of Public Health established the Massachusetts Tobacco Control Program (MTCP).

The MTCP was designed to curtail tobacco death and disease associated with smoking by preventing young people from taking up tobacco Use, helping adult smokers to quit, and protecting non-smokers from the adverse health effects of environmental tobacco smoke. The state has spent over \$125 million since 1993 to curb smoking in the state, and this year's budget is \$31 million.

Massachusetts has accomplished much in curbing involuntary exposure to environmental tobacco smoke through the adoption of policies at the local level that prohibit smoking in public places and through an aggressive counter-advertising campaign that alerts both smokers and nonsmokers to the dangers of second-hand smoke. Our campaign has been highly successful, and mirrors much of what the Koop-Kessler Commission advocates. Any national settlement could easily adopt the measures we have put in place in Massachusetts to address this problem.

The campaign has three major components, a media campaign (\$13 million), local policy and prevention initiatives, and cessation services. I will focus on what Massachusetts has done on ETS.

HOW MASSACHUSETTS IS PROTECTING NON-SMOKERS FROM ENVIRONMENTAL TOBACCO SMOKE

The effort to reduce this risk has taken two parallel paths. First, MTCP-funded programs, especially local Boards of Health, have worked to establish institutional or governmental policies to prohibit smoking in areas where non-smokers might be affected. Second, MTCP has informed the public about the dangers of ETS through the statewide media campaign as well as public information activities sponsored by local programs, resulting in voluntary adoption of smoking restrictions at home and in public places.

Smoking bans for municipal buildings have been widely adopted. Very few cities and towns banned smoking in municipal buildings before Question 1, and in 1992 fewer than 600,000 Massachusetts residents were protected by such bans. Between 1992 and 1997, however, 101 cities and towns enacted such provisions. The most recent data indicate that such restrictions are in effect in cities and towns whose combined population exceeds 2.9 million-nearly five times the 1992 figure. Smoking was banned in all schools, and all state government worksites by legislation passed in 1997. Voluntary bans have been adopted in all major sport stadiums, including Fenway Park and Foxboro Stadium.

MASS MEDIA

Our program commits \$13 to paid mass media of which one quarter is directed to the damages of ETS. The messages are hard hitting and have greatly increased the awareness of the dangers of ETS and support passage of local policies.

HELPING EMPLOYERS CONTROL ETS IN THE WORKPLACE

MTCP-funded programs have helped employers establish policies restricting smoking in the workplace. Local Boards of Health and the Tobacco Free Worksite Initiative both carry out such activities. Since the programs began in 1994, they have:

- Initiated contact or responded to requests from over 4,500 worksites; and
- Provided technical assistance or information to nearly 1,800 of those locations.

- 499 of those worksites are known to have implemented new tobacco control policies, affecting over 70,000 employees.

A survey of Massachusetts' 3,000 largest employers found that 78 percent have complete smoking bans and 20 percent require designated smoking areas. Only 2 percent of these employers have no policy restricting smoking in the worksite.

Massachusetts workers are now significantly less exposed to environmental tobacco smoke than before MTCP began. The percentage of workers in sites that ban indoor smoking climbed from 53 percent to 65 percent between 1993 and 1997 surveys. Average ETS exposure at work has fallen from 4.5 to 2.2 hours per week.

RESTRICTING SMOKING IN RESTAURANTS

Massachusetts residents have strongly and consistently favored policies restricting smoking on restaurants. A 1993 survey found that only 2 percent preferred a policy of unrestricted smoking in restaurants, while 47 percent supported complete bans. Provisions restricting smoking in restaurants were relatively rare before Question 1 and nearly always required simply that a portion of the space in the restaurant be designated as non-smoking. Since the MTCP local programs began operations, restaurant smoking restrictions have spread widely and the population protected by restrictions on smoking in restaurants has more than doubled. During the same period, moreover, the population protected by complete bans in restaurants has grown from less than 60,000 to nearly 1 million persons.

Smoking bans have not harmed restaurant business. Over 100 Massachusetts cities and towns have enacted some restriction on smoking in restaurants. Some restaurant owners have opposed restrictions, arguing that their business would be adversely affected. Recent analyses of the Massachusetts towns adopting restrictions indicate no adverse effects. If anything, smoking restrictions are associated with gains in restaurant revenues and employment.

After towns adopted highly restrictive restaurant smoking policies, average restaurant receipts were between 5.5 and 8.6 percent higher than if they had not adopted the restrictions. Highly restrictive policies—either a complete ban or a requirement for separate rooms for non-smokers—were in force in 29 Massachusetts towns between 1992 and 1995. An econometric analysis using data on meal taxes found that restaurant revenues in these towns exceeded their predicted levels for the periods after adopting the restrictions, where predictions were based on patterns in 22 cities and towns without such restrictions.

A separate analysis suggests that the number of restaurant jobs increased, on average, in towns adopting smoking restrictions. In towns with any kind of smoking restriction, the total number of restaurant employees in 1992–1995 was 9.9 percent higher than would be expected, based on the patterns in towns without restrictions. In towns with highly restrictive policies, the estimated effect was 5.9 percent, which is within the margin of estimation error.

The analytical results are consistent with research elsewhere, and also with Massachusetts residents' statements about their use of restaurants. Survey respondents say that they would be more likely, rather than less likely, to frequent restaurant, clubs and bars with smoking bans. Moreover, although 37 percent report that they have avoided going somewhere because they would be "exposed to too much second-hand smoke," only 9 percent have avoided going somewhere "because smoking was forbidden."

THE IMPACT OF RESTRICTIONS ON ENVIRONMENTAL TOBACCO SMOKE

Cigarette consumption has dropped by 31 percent since 1992. Data from the Tobacco Institute show that cigarette purchases in Massachusetts in 1992 totaled 117 packs per person aged 18 or older. By the first half of 1997, purchases had dropped by 31 percent to 81 packs per capita. The steepest declines occurred in the 2 years following new excise taxes (1993 and 1997).

Those who do smoke are smoking fewer cigarettes. Part of the decline in cigarette consumption has occurred because Massachusetts smokers are smoking less. The 1993 Massachusetts Tobacco Survey (MTS) found that adult smokers smoked an average of 20 cigarettes per day. That number fell to 16 cigarettes per day in 1996–1997, the most recent 2-year period of the Massachusetts Adult Tobacco Survey (MATS).

RESTRICTIONS ON SECOND-HAND SMOKE HAVE CONTRIBUTED TO AN OVERDECLINE IN TOBACCO USE

Adult smoking rates are declining. The annual surveys of Massachusetts adults suggests a slow but steady decline in the proportion who smoke. The 1993 survey estimated that 22.6 percent of Massachusetts adults—about one million persons—were

smokers. The 1997 estimate of 20.6 percent suggests that the number of adult smokers has fallen by about 9 percent. This implies a reduction of 90,000 in the number of smokers.

ENVIRONMENTAL TOBACCO SMOKE AND NATIONAL TOBACCO LEGISLATION

The current settlement provides little protection to the non-smoker from the adverse health effects of environmental tobacco smoke. There are a number of measures that can be included in any national settlement that would do so.

(1) Cover the Costs of Second-Hand Smoke

Environmental tobacco smoke costs the American public money and health each year. These costs are not reflected in the settlement cost and they should be.

(2) Include Effective Warnings

Second, the settlement proposes five new warning labels on packages of cigarettes and in cigarette advertisements. None address the effects of second-hand smoke. Three additional warnings are needed to do so.

WARNING: ENVIRONMENTAL TOBACCO SMOKE CAN KILL.

WARNING: ENVIRONMENTAL SMOKE CAUSES RESPIRATORY DISEASE
AMONG YOUNG CHILDREN.

WARNING: ENVIRONMENTAL TOBACCO SMOKE CAN CAUSE LUNG CANCER
AND HEART DISEASE AMONG HEALTHY NON-SMOKERS.

(3) Expand ETS Restrictions

The current settlement excludes restaurants, bars, bingo parlors, and other places of hospitality. There is no reason to do so. The current settlement should prohibit smoking in restaurants with a possible phase in ban of smoking within other areas.

(4) No Immunity From ETS Lawsuits

The current settlement provides broad immunity from litigation brought because of the adverse health effects of second-hand smoke. There may be some basis for providing limited immunity for persons whose smoking has caused them disease. However, for exposed non-smokers there is no assumption of the risk, and the tobacco industry should not be given protection. These people should not be denied their opportunity to litigate against the tobacco industry. They simply did not assume the risk, and they should not have to pay.

(5) Media Campaign

The current settlement allocates over half a billion dollars for a paid national advertising campaign with a focus on youth by deglorifying and discouraging smoking. It is extremely important that this be expanded to include the adverse health effects of second-hand smoke.

PREPARED STATEMENT OF MICHAEL P. ERIKSEN, SC.D., OFFICE ON SMOKING AND HEALTH, NATIONAL CENTER FOR CHRONIC DISEASE PREVENTION AND HEALTH PROMOTION, CENTERS FOR DISEASE CONTROL AND PREVENTION, PUBLIC HEALTH SERVICE

Thank you for the opportunity to discuss the health hazards of exposure to environmental tobacco smoke and efforts to reduce exposure. I am Dr. Michael P. Eriksen, director of the Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention (CDC) in Atlanta, Georgia.

Over the past decade, knowledge of the hazards of exposure to environmental tobacco smoke (also known as ETS, passive smoke, or secondhand smoke) has expanded considerably. In 1986, the U.S. Surgeon General and the National Academy of Sciences formally recognized that ETS is a significant public health threat. In 1991, the Centers for Disease Control and Prevention's (CDC) National Institute for Occupational Safety and Health concluded that ETS is a potential occupational carcinogen, and recommended that exposures be reduced to the lowest feasible concentration. In 1993, the Environmental Protection Agency (EPA) issued a report providing additional information on the hazards of exposure, including an estimated 3,000 lung cancer deaths per year among nonsmoking adults and 150,000-300,000 cases of lower respiratory tract infections among children. ETS exposure causes increased episodes and increased severity of symptoms in children with asthma. Expo-

sure also has been linked with sudden infant death syndrome (SIDS). Furthermore, in recent years, research has emerged on the impact of ETS exposure on the development of heart disease among nonsmokers. There is mounting data that the overall burden of ETS-related heart disease is considerably higher than that for ETS-related lung cancer. In addition, data continue to emerge on the link between ETS and heart disease; for example, in a study reported earlier this year in the *Journal of the American Medical Association*, ETS exposure was associated with atherosclerosis which is not reversible.

Data from a 1996 CDC study found that among non-tobacco users, 87.9 percent had detectable levels of serum cotinine, a biological marker for exposure to environmental tobacco smoke, yet only 37 percent of adult non-tobacco users were aware enough of their exposure to report having been exposed to ETS either at home or at work. Both home and workplace environments were found in this study to significantly contribute to the widespread exposure to environmental tobacco smoke in the United States. In addition, a recent study by CDC found an alarming level of ETS exposure of children in their homes. Exposure ranged from 11.7 percent of children between the ages of 0 and 17 in Utah to 34.2 percent of children in Kentucky.

Although a 1992-1993 National Cancer Institute survey found that almost half of all workers had a smoke-free policy in their workplace, significant numbers of workers, especially those in blue-collar and service occupations, reported smoke-free policy rates considerably lower than the overall rate of 46 percent. The occupational group least likely to have a smoke-free policy was food service workers—waiters, waitresses, cooks, bartenders, and counter help. Of these 5.5 million workers, 22 percent are teenagers. In a 1993 CDC study, food service workers were found to have a 50 percent increased risk of dying from lung cancer as compared to the general population, and this increase was attributed to their workplace exposure to ETS. Although potential business losses are usually cited as the reason for excluding these establishments from smoking prohibitions, several studies across the country have shown no adverse impact on sales in these establishments after smoking is eliminated.

In recognition of the health consequences of exposure to ETS, the public health community has adopted several national health objectives related to ETS as part of or in conjunction with Healthy People 2000. These objectives include increasing the proportion of worksites that have adopted smoke-free policies and reducing the proportion of children regularly exposed to ETS in the home. Another Healthy People 2000 objective is to increase the number of states with comprehensive clean indoor air laws in workplaces, restaurants, and public places that prohibit smoking or limit it to separately ventilated areas only. An additional objective addresses reductions in the number of states with preemptive laws limiting more restrictive action at the local level. Recent data indicate that 21 states have enacted laws restricting smoking in private worksites but only one of these states meets the Healthy People 2000 State objective. Thirty-one states have enacted laws restricting smoking in restaurants; only three meet the objective. Although significant actions have been taken by states and localities to limit ETS exposure, much work remains to provide adequate protection to all Americans.

There are a variety of actions that Federal agencies are taking to reduce ETS exposure among the population. These actions fit within an overall framework to prevent and reduce tobacco use which includes data collection, research, state and community programs, school programs, media campaigns, and program evaluation.

Public education is an important component of efforts to reduce ETS exposure. CDC has conducted media and educational campaigns addressing ETS exposure in the home, restaurant, and workplace settings. CDC also has published a publication called "Making Your Workplace Smokefree: A Decision Maker's Guide," which can assist employers who are considering a smoke-free workplace in implementing this decision. In the area of prevention research, CDC is engaged in ongoing efforts to examine the impact of ETS on health. Specifically, CDC's National Center for Environmental Health is supporting laboratory-based prevention research to assess the exposure of the United States population to both active smoking and ETS by measuring serum cotinine in the National Health and Nutrition Examination Surveys. Efforts such as these are critical to our understanding of the extent of ETS exposure in the population. CDC also is working to better our understanding of the relationship of ETS exposure in nonsmokers to adverse health outcomes such as sudden infant death (SIDS), low birth weight, cardiovascular disease and lung cancer. An example of this effort is the growing evidence of ETS as a risk factor for SIDS. Preliminary analysis of data from CDC's Chicago Infant Mortality Study indicate that two of the significant risk factors for SIDS in an urban, largely African-American population were maternal smoking during pregnancy and infant exposure to passive

smoking. These results were presented at the fourth SIDS International Conference and the Annual Meeting of the Society for Pediatric Research in June 1996.

In the area of worker safety, CDC's National Institute for Occupational Safety and Health (NIOSH) conducted an Indoor Air Quality Health Hazard Evaluation at Bally's Park Casino Hotel in Atlantic City, New Jersey. The evaluation, completed in 1996, demonstrated that non-smoking employees working in the gaming areas of a large casino demonstrated pre-workshift exposure to ETS at levels 50 percent higher than those observed in a representative sample of U.S. workers exposed to ETS at home and work. The evaluation also demonstrated that the serum and urine cotinine of these employees increases during the workshift, such that levels of exposure were twice as high after working a shift in the casino than the representative sample of U.S. workers mentioned above. As a result of this analysis, NIOSH presented recommendations that would protect casino workers from ETS exposure. These recommendations included: eliminating tobacco use from the workplace and implementing a smoking cessation program for employees; isolating areas where smoking is permitted; establishing separate smoking areas with dedicated ventilation; and restricting smoking to the outdoors (away from building entrances and air intakes).

State prevention efforts also are critical; survey data indicate that public education campaigns and local community efforts to limit smoking in public places in California and Massachusetts have been associated with reported reductions in ETS exposure of both adults and children. Finally, clinicians, particularly pediatricians, also have an important role to play in educating parents about the impact of ETS exposure on their children. Interest in ETS is not only confined to the United States. Most notably, there is the work of the EPA to bring the ETS and children issue to the attention of the G8. The administration is planning an international conference to address these concerns.

Last summer, President Clinton announced an Executive Order requiring Federal buildings to be smoke-free or have separately ventilated smoking areas. Furthermore, in the five principles contained in his September statement on components for comprehensive tobacco legislation, the President included limiting exposure to ETS in worksites and public places. The proposed settlement language of June 20th provides a starting point for efforts to address this issue. There appears to be consensus that national legislation should serve as a "floor" rather than a "ceiling" and not preempt stronger state and local action, as is suggested by the Healthy People 2000 objective relating to preemption. Involvement of local communities in education regarding enforcement of restrictions will help to ensure adequate implementation. Furthermore, smoking should be prohibited on all international flights that land, stop, or take off in the U.S., given that the tobacco industry has stated that it would support such Federal legislation in the recent Broin flight attendant class action settlement.

In conclusion, in your deliberations on this issue, please remember that harm caused by passive smoke is inflicted on those who have decided not to smoke, or, in the case of young children, cannot make an informed choice. Even one preventable death among Americans who have decided not to smoke should be considered unacceptable.

PREPARED STATEMENT OF ALFRED MUNZER, MD, PAST PRESIDENT,
AMERICAN LUNG ASSOCIATION

Mr. Chairman, and members of the Committee on The Environment and Public Works, I am Dr. Alfred Munzer, Past President of the American Lung Association (ALA). I am also Director of Critical Care and Pulmonary Medicine at Washington Adventist Hospital in Takoma Park, MD, where I specialize in the treatment of diseases of the Lung.

The ALA is the nation's oldest voluntary health organization and is dedicated to the prevention and control of lung disease. This organization and its medical section, the American Thoracic Society, has long recognized the contribution of indoor and outdoor air pollution to the development and exacerbation of lung disease. The ALA has devoted over three decades to the implementation of programs aimed at improving air quality in our homes and in our communities.

As a pulmonary physician, I all too often see first hand the devastation caused by tobacco use. I see the men and women who come to me with end-stage lung cancer or emphysema, seeking a medical miracle to cure their disease. I see the children who cough and wheeze as their asthma is made worse by exposure to smoke exhaled by smokers and that comes from the burning end of a cigarette, pipe, or cigar. Smoke of this nature has been commonly called involuntary, passive, or sec-

onhand smoke. Today, it is generally referred to as environmental tobacco smoke, or "ETS".

Mr. Chairman, the American Lung Association believes that all workers and the entire public must be protected from ETS. Further, it is our strong belief that state and local governments must retain the right to enact stronger tobacco control laws.

These principles are one important factor in our opposition to the "Sweetheart Deal" negotiated by the Attorneys General with the Tobacco Industry last June. We also oppose the "Deal", and will oppose any legislation that grants special protection, such as immunity or caps on liability, to the industry. We have testified several times recently before committees of this Congress, and our views are well known.

Today, I want to re-state the opinion of the American Lung Association and its medical section, the American Thoracic Society, that Environmental Tobacco Smoke is a threat to the health, and the lives, of all Americans. Much progress has been made on the local and state level since the publication of the EPA's 1992 risk assessment "Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders". A good example is the recent California action to protect patrons and employees of bars by making them entirely smoke free, along with restaurants and other public places.

But once again, the scientific foundation for elimination of the ETS threat has come under attack, just as it did immediately following publication of the EPA document. I think it is important to understand the facts before anyone leaps to any conclusion based on unpublished research that is still undergoing peer review. On March 19, 1998, the Wall Street Journal printed an article titled "Smoking Out Bad Science" authored by Ms. Lorraine Mooney, a medical demographer for the Cambridge, Great Britain based European Science and Environment Forum. In her article, Ms. Mooney attacks a study of ETS conducted by the International Agency for Research on Cancer on statistical grounds. Several British newspapers also attacked the study. The tobacco industry is attempting to use these reports to further its agenda by issuing press releases and writing opinion editorial articles that tout "no risk". The press reports and opinion editorials accuse the World Health Organization of suppressing this study. That assertion is false.

The World Health Organization issued a statement on March 9, 1998. WHO states that the study did in fact find an increase of 16 percent in the risk of lung cancer for non-smoking spouses of smokers, and a 17 percent increase for exposure to passive smoking at the workplace. The study was conducted in 12 centers from seven European countries including 650 cases of lung cancer and 1,542 controls and is the largest study carried out in European populations to date. However, it is the small sample size used in the study that led to the finding that neither increased risk was statistically significant.

WHO concludes "The results of this study, which have been completely misrepresented in recent news reports, are very much in line with the results in the similar studies in Europe and elsewhere: passive smoking causes lung cancer in non-smokers."

Mr. Chairman, there is no need to be confused. The evidence is there and it is overwhelming. So let us look back at how the scientific body of evidence has been accumulated and also at attempts to discredit that evidence.

ETS has been the topic of discussion for more than 25 years. Its health effects were first reviewed in 1972 in the U.S. Surgeon General's report on smoking and health. That report was devoted, in part, to public exposure to air pollution caused by tobacco smoke. It concluded that "an atmosphere contaminated with tobacco smoke can contribute to the discomfort of many individuals."

In 1982, the U.S. Surgeon General again examined the issue of passive smoking but this time in the context of smoking and the development of cancer. At that time there were only three epidemiological studies linking passive smoking and lung cancer. Even with this limited amount of evidence, the Surgeon General concluded that the evidence in these studies is the cause for grave concern regarding the possible serious public health problem associated with passive smoke and lung cancer.

By 1986, Federal interest in the health effects of ETS had grown to the extent that the U.S. Surgeon General released a report devoted entirely to the issue of passive smoking. By that time, the number of epidemiological studies had increased to 13, 11 of which showed a positive correlation between passive smoking and lung cancer in healthy nonsmokers. Based upon these findings, the Surgeon General concluded that exposure to secondhand smoke is a cause of lung cancer in healthy nonsmokers. He also concluded that children whose parents smoked had an increased frequency of respiratory symptoms and infections, compared to children whose parents were nonsmokers.

Asthma is a major area of priority for the American Lung Association. Asthma is the leading serious chronic illness among children and the major cause of school absenteeism. Asthma deaths from 1979 to 1993 increased almost 99 percent. ETS exposure is also associated with additional attacks and increased severity of symptoms in children with asthma. The EPA estimates that 200,000 to 1 million asthmatic children have their condition worsened by ETS, and that ETS is a risk factor for new cases of asthma in children without a history of symptoms.

Several organizations—the National Academy of Science and the International Agency for Research on Cancer—published reports which drew conclusions similar to those of the EPA. The International Agency for Research on Cancer, for example, released a report on cancer which concluded that “knowledge of the nature of sidestream and mainstream smoke, of materials absorbed during passive smoking, and of the quantitative relationships between dose and effect that are commonly observed from exposure to carcinogens leads to the conclusion that passive smoking gives rise to some risk of cancer.”

In December 1992, the EPA released its report assessing current scientific evidence on the risks of exposure to ETS “Health Effects of Passive Smoking: Assessment of Lung Cancer in Adults and Respiratory Disorders in Children.” The risk assessment focused on the potential correlation between ETS and lung cancer in nonsmoking adults and respiratory disease and pulmonary effects in children. Based on the total weight of evidence in the scientific literature, the EPA designated ETS as a Group A carcinogen, a rating used only for extremely hazardous substances known to cause cancer in humans. It ranked ETS in a class of carcinogens which includes asbestos, benzene, and radon.

After evaluating 30 epidemiological studies on lung cancer in nonsmoking adults, the EPA determined that ETS is responsible for approximately 3,000 lung cancer deaths each year. The agency also added that ETS accounts for the development of 20 percent of all lung cancers caused by factors other than smoking. For the average adult, ETS increases their risk of cancer to approximately 2 per 1,000. From these conclusions, it is clear that ETS is a serious hazard to the health of nonsmoking adults.

After evaluating more than 100 studies on respiratory health in children, the EPA concluded that ETS exposure increases their risk of lower respiratory infections, like bronchitis and pneumonia. ETS is known to cause an estimated 150,000 to 300,000 cases of respiratory illnesses in children up to 18 months each year. Of these cases, 7,500 to 15,000 result in hospitalization.

Also of concern are the risks for children whose mothers smoked during and after pregnancy. The U.S. Department of Health and Human Services has reported that, under these circumstances, children are three times more likely to die of Sudden Infant Death Syndrome (SIDS) than children of nonsmoking mothers. The risks of SIDS double for children whose mothers smoked after birth and not during pregnancy than for children reared in nonsmoking environments.

The evidence presented represents very sound science and more than adequately supports the conclusions by the EPA regarding exposure to ETS. Uniquely, each of the studies and reports used to reach this conclusion were developed and edited by different processes. In contrast to assertions made of opponents of the EPA’s findings, such as those offered by the tobacco industry, it is this diverse methodology which only strengthens the validity of the conclusion of this research combined.

Without spending too much time on the tobacco industry criticisms of the risk assessment, let me first remind the committee that after 60,000 studies linking smoking with disease and death, this industry still fails to acknowledge that it produces a lethal product. This year, in the Minnesota Tobacco Trial, Walker Merryman, chief spokesman for the Tobacco Institute was quoted as saying: “We don’t believe it’s ever been established that smoking is the cause of disease”. This is clearly the same old tobacco industry, denying, offering excuses, and challenging any science that links smoking with illness and death.

This is an industry which has criticized each Surgeon General’s report since 1964. Among the industry criticisms is the failure of the EPA to include studies which show no relationship between ETS and lung cancer. Among the studies cited by the industry as examples are several funded by the National Cancer Institute:

Brownson, Ph.D., et. al. Passive Smoking and Lung Cancer in Nonsmoking Women.—*Am J Public Health* 82:1525–1530, 1992.—This study was published in November 1992, too late for inclusion in the risk assessment. The industry contends that the risk assessment would change if the study was included. However, the author’s of the study conclude: “Ours and other recent studies suggest a small but consistent increased risk of lung cancer from passive smok-

ing. Comprehensive actions to limit smoking in public places and worksites are well-advised."

Stockwell, Sc.D., et. al. Environmental Tobacco Smoke and Lung Cancer in Nonsmoking Women. *J Natl Cancer Inst* 84:1417-1422, 1992.—This study was not included in the final risk assessment and again the industry claims it is a negative study therefore left out purposefully. However, the author's conclude: "These findings suggest that long-term exposure to environmental tobacco smoke increases the risk of lung cancer in women who have never smoked."

The real issue here is statistical significance and how it is used. In defining the true meaning of statistical significance, I'd like to defer to the description used by a well-known environmental epidemiologist, Dr. Douglas Dockery, an Associate Professor at the Harvard School of Public Health. Dr. Dockery suggests:

"A naive critique would say that those studies which are not statistically significant do not show an effect. However, statistical significance is not a measure of association of environmental tobacco smoke with lung cancer, but rather a measure of the stability of the association. It measures the statistical power of the study. In a crude sense it is a measure of study size, and studies that do not achieve statistical significance are simply too small. This does not mean that they do not provide important information on risks.

It is not appropriate to discard studies which do not achieve statistical significance, but rather they should be included giving them a weight which reflects the stability, that is the uncertainty, of their effect estimate. This is exactly what the meta-analysis of these studies provides."

Mr. Chairman, we at the American Lung Association believe the EPA's findings are clear, objective, and complete in regard to ETS. The evidence used to show the relative risks associated with exposure to ETS, and its linkage to the development of lung cancer, are more compelling than similar correlations drawn for other environmental carcinogens.

The California Environmental Protection Agency is the latest to concur. In its September 1997, report "Health Effects of Exposure to Environmental Tobacco Smoke" it states: "ETS exposure is causally associated with a number of health effects." Those listed are:

Developmental Effects—Low birthweight; Sudden Infant Death Syndrome (SIDS)

Respiratory Effects—Acute lower respiratory tract infections in children (bronchitis and pneumonia); Asthma induction and exacerbation in children; Chronic respiratory symptoms in children; Eye and nasal irritation in adults; Middle ear infections in children

Carcinogenic Effects—Lung Cancer; Nasal Sinus Cancer

Cardiovascular Effects—Heart disease mortality; Acute and chronic coronary heart disease morbidity.

Mr. Chairman, all of these effects caused by ETS are carefully and scientifically documented in the California study—additional, compelling evidence for strong measures to control this threat to the public health.

The California report states: "With respect to lung cancer, three large U.S. population-based studies and a smaller hospital based case-control study have been published since the most recent comprehensive review (U.S.EPA, 1992); the three population based studies were designed to and have successfully addressed many of the weaknesses for which the previous studies on ETS and lung cancer have been criticized. Results from these studies and the smaller case-control study are compatible with the causal association between ETS exposure and risk of lung cancer in nonsmokers already reported by the U.S EPA(1992), Surgeon general (U.S. DHHS, 1986) and NRC (1986)".

The Scientific Review Panel to the California Air Resources Board said; "Based on the available evidence, we conclude ETS is a toxic air contaminant".

A toxic air contaminant—how can we continue to expose our citizens to a toxic air contaminant indoors?

The California report also notes annual mortality estimates associated with ETS exposure in California, including approximately 120 deaths from SIDS (Sudden Infant Death Syndrome), 16-25 deaths in infants and toddlers from bronchitis and pneumonia, approximately 360 deaths from lung cancer and 4,220-7,440 deaths from heart disease. Thus, ETS has a major public health impact.

That same California report quantifies the effects of ETS as causing between 8,000 and 26,000 new cases of asthma in children yearly in the United States as well as exacerbating asthma in between 400,000 and one million children. And a report by the Australian National Health and Medical Research Council (Nov. 28, 1997), after reviewing over 400 individual medical studies, concluded that passive smoking contributes to the symptoms of asthma in 46,500 Australian children each

year. Finally, pediatrician Peter Gergen of the Agency for Health Care Policy and Research reports on a study of 7,680 children. Compared with children in non-smoking homes, those in homes where adults smoked a total of at least a pack of cigarettes a day were twice as likely to have asthma between 2 months and 5 years old. This translates, according to Gergen, to about 147,000 cases of smoking-induced asthma in kids 2 months to 5 years old. (Reported in USA Today, Feb. 3, 1998)

Nationwide, ETS is responsible for 53,000 deaths every year, according to Professors Stanton Glantz, Ph.D. and William Parmley, M.D., School of Medicine, University of California, San Francisco. Their two studies, "Passive Smoking and Heart Disease: Epidemiology, Physiology and Biochemistry" (Circulation 1991; 1-8) in 1991 and a follow up study, titled "Passive Smoking and Heart Disease: Mechanisms and Risk" (Journal of the American Medical Association 1995; 273:1047-1053) in 1995 attribute 37,000 deaths to heart disease, 4,000 deaths to lung cancer and 12,000 deaths to other cancers.

The risk for lung cancer due to exposure from ETS rises considerably for food-service workers. Waiters and waitresses have a 50-90 percent increased risk of lung cancer that is most likely caused by restaurant tobacco smoke according to a study, titled "Involuntary Smoking in the Restaurant Workplace" (Journal of the American Medical Association 1993;270:490-493).

Mr. Chairman, I hope all of this body of evidence I have presented to the committee today will enable you to step beyond the criticisms offered regarding the validity of the EPA risk assessment and other studies, and encourage you to move forward in your efforts to address the real issue on the table—adequately responding to the public health issue associated with exposure to ETS.

I urge this committee to take into consideration the growing support for smoke-free public places. Each year, the American Lung Association publishes "State Legislated Actions on Tobacco Issues" (SLATI), a complete survey of state tobacco laws. In our 1997 edition, we report on restrictions on smoking in public places:

"Forty-eight states and the District of Columbia have some restriction on smoking in public places. These laws range from simple, limited restrictions, such as designated areas in schools, to laws that limit or ban smoking in virtually all public places, including elevators, public buildings, retail stores, restaurants, health facilities, public conveyances, museums, shopping malls, retail stores and educational facilities (Vermont). California and Washington require enclosed separately ventilated smoking areas in private workplaces, or smoking must be banned entirely. Of the states that limit or prohibit smoking in public places, 43 restrict smoking in government workplaces and 23 restrict smoking in private sector workplaces".

It is clear that most significant progress has occurred at the local and state level to protect citizens from ETS. Over two hundred and fifty-five communities across the country have enacted ordinances that restrict smoking in the workplace. The enormous success of local ordinances has resulted in battles with the tobacco industry over local control. The tobacco industry has recognized the effectiveness of these local clean indoor air ordinances and has spent millions of dollars in efforts to defeat them. Their favorite tactic is to support passage of weak state laws that preempt the authority of state and local governments to enact more stringent regulations. So far, the tobacco industry has been successful stripping localities in 13 states of their power to pass clean indoor air ordinances. Communities are beginning to fight back and in 1997 Maine became the first state to repeal of a preemptive clean indoor air law.

It is imperative, as I indicated earlier, that Congress not limit the authority of state and local governments to enact legislation and regulations which they believe are necessary to protect their citizens from ETS in their jurisdictions. Communities deserve the right to pass laws that protect their citizens from breathing secondhand smoke.

Does the public support smoke-free facilities? The answer is an emphatic yes! A majority of Californians believe it is important to have smoke-free restaurants and smoke-free bars and nightclubs, although to varying degrees. A very large majority (85 percent) believe it is important to have smoke-free restaurants. When asked how important it is to have smoke-free bars and nightclubs, 55 percent feel it is important, with 35 percent saying it is very important and 20 percent feeling it is somewhat important. There is widespread agreement among the public that smoking ordinances are an effective way to reduce the number of people who smoke in public places. Eight in ten Californians (80 percent) agree with this contention. (Field Research Corporation)

The tobacco industry and their front groups have claimed that smoking restrictions in bars and restaurants would devastate the hospitality industry. These claims

are false. A report by Stanton A. Glantz, PhD and Lisa R. A. Smith studied the effect of ordinances in 15 cities that require smoke-free restaurants and bars. The report, published in the American Journal of Public Health, found that smoke-free ordinances do not adversely affect either restaurants or bars. (Am J Public Health 1997;87:1687-1693)

We believe the 1986 report of the Surgeon General has the best recommendation for us to consider. In its conclusion, the report clearly states, "Simple separation of smokers and nonsmokers within the same air space may reduce, but does not eliminate, exposure of nonsmokers to ETS." Therefore, it is the responsibility of employers and employees to "ensure that the act of smoking does not expose the nonsmoker to tobacco smoke" and for smokers to "assure that their behavior does not jeopardize the health of other workers." In addition, the Surgeon General stated that smokers have the "responsibility to provide a supportive environment for smokers who are attempting to stop."

The American Lung Association urges you to look to the report of the Koop-Kessler Commission for guidance in setting policy on ETS and on development of a national tobacco control policy. The Koop-Kessler report made a number of specific recommendations regarding ETS:

Smoking should be banned in all work sites and in all places of public assembly, especially those in places where children are present.

Smoking should be banned in outdoor areas where people assemble, such as service lines, seating areas of sports stadiums and arenas, etc.

Schools should be required to be 100 percent smoke-free in all areas of their campuses.

Smoking should be banned on all forms of transportation, including bus, train, commuter services, and flights originating in or arriving at the us

Smoking should be banned at all Federal workplaces, including branches of the military and the Department of Veterans' Affairs and its hospitals.

The report goes on to recommend that a comprehensive education and public awareness program be developed and that economic incentives for smoke-free workplaces be established.

Mr. Chairman, the American Lung Association urges Congress to follow these ETS recommendations as well as all of the recommendations in the Koop-Kessler report. Then, and only then, can I anticipate being slowly put out of a job as the devastation from smoking on our lungs and our bodies is diminished and ultimately ended.

PREPARED STATEMENT OF ROBERT K. LEMONS, RPA, CPM, BUILDING OWNERS AND MANAGERS ASSOCIATION (BOMA) INTERNATIONAL

INTRODUCTION

Good morning, Mr. Chairman and members of the Committee. My name is Robert Lemons. I am president of the Building Owners and Managers Association (BOMA) of Boston. I am also Senior Vice President of Spaulding & Slye, an integrated real estate services company specializing in office, research and development, industrial, and retail space.

Today I am representing our national organization, BOMA International. BOMA is North America's largest and oldest trade association exclusively representing the office building industry. Its 16,000 members own or manage over 6 billion square feet of commercial property.

SMOKING INDOORS: A MAJOR CONCERN FOR BUILDINGS

Thank you for the opportunity to present testimony today. We commend you for your leadership in addressing the important issue of smoking indoors.

BOMA has a strong concern about second-hand smoke in buildings. Most Americans spend the majority of their day indoors, and building owners and managers have a responsibility to their tenants to provide a healthy indoor environment.

The health risks posed by second-hand smoke are beyond dispute. Since 1993, it has been classified as a Group A carcinogen by the U.S. EPA, which concluded that second-hand smoke causes as many as 3,000 deaths from lung cancer each year.

More and more evidence bolsters such findings. A study conducted last fall by the California Environmental Protection Agency concluded that second-hand smoke is responsible for as many as 62,000 deaths from heart disease, 2,700 deaths from Sudden Infant Death Syndrome (SIDS), and 2,600 new cases of asthma a year. The U.S. Surgeon General's Office has termed the California study "the single best, com-

prehensive review of the adverse effects of environmental tobacco smoke.” (A Business Week article highlighting these findings is included as Attachment A.)

Clearly, steps are needed to protect office building tenants, their employees, guests, and clients who may be exposed to this known carcinogen.

BOMA SUPPORTS TITLE IV OF PROPOSED SETTLEMENT

BOMA International believes that the most effective course of action is to prevent contaminants from being introduced into the workplace in the first place. Second-hand smoke is one of the leading contributors to indoor air pollution, and a ban on smoking in the workplace would significantly improve the quality of the air we breathe.

On a broader scale, BOMA has worked with industry groups and government agencies to disseminate sound guidance aimed at improving indoor air quality management in commercial properties. We have pushed for needed research on the sources of indoor air quality problems. Second-hand smoke is certainly one of those sources.

When the U.S. EPA first determined that second-hand smoke is a Group A carcinogen, BOMA International responded by adopting a resolution calling for a Federal ban on smoking in the workplace. (A copy of this resolution is included as Attachment B.)

Title IV of the proposed tobacco industry settlement offers a responsible means for achieving this goal. It reflects the same approach as taken in the “Smoke Free Environment Act” (S. 826), legislation introduced by Senator Frank Lautenberg. BOMA International has strongly supported the Smoke Free Environment Act since it was first introduced in the 103d Congress.

BENEFITS OF A SMOKING BAN

Many building owners have already chosen to ban or limit smoking within their buildings even if their particular state, county or municipality has not yet made it mandatory. In a survey that BOMA International conducted last year for our publication *Cleaning Makes Cents*, we learned that 68 percent of the respondents prohibit smoking inside their building, and 29 percent limit it to tenant suites. Just 1 percent of the respondents allow smoking anywhere in their building. (See Attachment C for a summary of this survey.)

Building owners have taken these steps in response to health concerns and for other reasons as well. Safety, for example, is a sometimes overlooked factor. According to BOMA’s Fire Safety Survey, conducted last in 1993, smoking was the leading cause of fires in buildings, cited by 26 percent of the respondents. (An article outlining these results is included as Attachment D.)

The elimination of smoking from buildings has yet another benefit. It reduces cleaning expenses by an average of 10 percent—quite a chunk considering that cleaning makes up 13 percent of the average building’s total annual expenses. A property with a no-smoking policy has no need to clean ashtrays and cigarette butts; requires fewer filter changes; sees a reduction in wall cleaning and painting; and needs less frequent dusting and vacuuming.

SEPARATELY VENTILATED SMOKING AREAS

Because of the health and liability concerns associated with second-hand smoke, the ideal course of action is to eliminate smoking in buildings completely.

Experience indicates, however, that some tenants may want their employees to be able to smoke within their leased premises. The solution in this case is for the parties involved to agree to the creation of a separate designated area, exhausted directly to the outdoors and maintained under negative pressure. This arrangement, which would be allowed under Title IV of the proposed tobacco settlement, is also provided for in the Smoke Free Environment Act, which BOMA supports.

Currently, most office buildings do not have separately ventilated areas. Between 8 to 12 percent of respondents to BOMA surveys indicate that their building has such an area—but we cannot verify at this time what portion of those rooms actually meet the definition of being “ventilated directly to the outdoors.”

We can confirm that the build-out of such areas is extremely expensive and may be technically infeasible in some cases. The U.S. General Services Administration has estimated the design and installation of separate ventilation systems in a new building to cost \$30-\$50 per square foot. For an existing building, figures provided by BOMA members indicate much higher costs—over \$100 per square foot for the actual build-out, plus a similar amount based on the installation of furnishings, floor and wall coverings.

DEVELOPING LEGISLATIVE LANGUAGE

BOMA recommends that, in developing legislative language to implement Title IV of the proposed tobacco settlement, the Environment and Public Works Committee incorporate S. 826, the Smoke Free Environment Act. In particular, we draw your attention to the issue of which entities are responsible for administering a smoking ban in buildings.

In multi-tenant buildings, it is reasonable to expect the property owner or manager to implement a smoking ban in “common areas” of the building—in other words, those areas that are not leased to a particular tenant. Similarly, it is reasonable to expect the tenants themselves to implement a smoking ban within their own leased premises. S. 826 defines the term “responsible entity” to clarify this issue.

Building management will take the necessary steps to implement a smoking ban and educate tenants on the health risks associated with second-hand smoke. However, we cannot take responsibility for building occupants who refuse to comply with the ban. If an individual (who is not an employee of the building owner or manager) chooses to smoke in violation of the smoking ban, the property’s owner or manager should not be held liable, since the person is not under their direct control. This issue is addressed by a paragraph in S. 826 entitled “Isolated Incidents,” which clarifies that such incidents should not be considered violations of the smoking ban subject to penalty.

CONCLUSION

The removal of second-hand smoke would protect building occupants by eliminating a recognized source of indoor air quality problems, a fire safety hazard, and a liability concern for owners and tenants alike.

BOMA will continue to do everything we can to reduce—and ideally eliminate—the threat posed by second-hand smoke in commercial buildings.

Mr. Chairman, we thank you for your interest in this issue and in our recommendations for crafting legislative language to make the proposed smoking ban a reality. I will be pleased to answer any questions you may have.



**Attachments for
Hearing Testimony**

April 1, 1998

Science & Technology

HEALTH

YOU BET I MIND

A report shows new risks from secondhand smoke

While lawyers in Florida pursue the nation's first class action addressing the dangers of secondhand cigarette smoke, California's Environmental Protection Agency has quietly released the most devastating report yet demonstrating exactly what those dangers are. The director of the Surgeon General's Office on Smoking & Health calls the report "the single best comprehensive review of the adverse effects of environmental tobacco smoke on humans."

In 1993, the U.S. Environmental Protection Agency released a report concluding that the blue haze of secondhand cigarette smoke causes 3,000 cases of lung cancer annually in the U.S. But

the industry's response to the U.S. EPA's secondhand smoke report in 1993 was a lawsuit claiming the report was based on faulty science and should be withdrawn. The suit is still pending.

The California report looked at a wide range of ailments, sometimes finding troubling warning signs linking the illnesses to secondhand smoke even though there was insufficient evidence to prove that the smoke caused the diseases. For example, it noted that some studies have shown that mothers exposed to secondhand smoke are more likely to have children with birth defects. It said secondhand smoke "may pose a hazard for neuropsychological development" in children. Those findings were based on a variety of epidemiological, or statistical, studies that found an increase in problems in fetuses and children exposed to tobacco smoke.

INSIDIOUS. The report also found that children "are especially sensitive to the respiratory effects of [environmental tobacco smoke] exposure," which could be related to the rise in childhood asthma.

The California report follows a May study from Harvard University that detailed the effects of secondhand smoke on 32,046 women. Its

the EPA didn't look at the many other risks posed by secondhand smoke.

The California report is the first comprehensive government document to conclude that secondhand smoke also causes as many as 62,000 heart disease

spontaneous abortions. More than 50 compounds in tobacco smoke were identified as carcinogens. Six were shown to be sources of reproductive or developmental problems.

"The evidence is very strong and consistent that environmental tobacco smoke has adverse effects on human health, particularly for kids," says Michael P. Eriksen, director of the Surgeon General's Office on Smoking & Health.

A draft of the report was circulated in February for public and scientific comment. "It has gone through an extremely rigorous scientific peer review," says William Vance, the California EPA's deputy director for scientific affairs, whose office prepared the report. That included a review by tobacco industry officials, who dismissed its findings.

"This adds nothing new to the debate," said Thomas Lauria, a spokesman for the Tobacco Institute in Wash-



ington. The industry's response to the U.S. EPA's secondhand smoke report in 1993 was a lawsuit claiming the report was based on faulty science and should be withdrawn. The suit is still pending.

deaths, 2,700 deaths from sudden infant death syndrome, and 2,600 new cases of asthma. It says secondhand smoke might increase the risk of cervical cancer and

heart disease risk of women not exposed, the researchers found. Women who said they were occasionally exposed to secondhand smoke had a relative risk of 1.58, according to the study.

Most recently, on Sept. 1, the American Heart Assn. published the results of a study showing that cigarette smoke in the home had an insidious effect on children with high cholesterol levels. Exposure to the smoke reduced their levels of HDL cholesterol, the so-called good cholesterol that protects against heart disease.

The dangers of secondhand smoke are central to a lawsuit being tried by Miami lawyers Stanley and Susan Rosenblatt. The Rosenblatts represent nonsmoking flight attendants who say they contracted cancer and other ills from breathing passengers' smoke. The trial is expected to wind up in October.

The Rosenblatts and the tobacco industry have made it clear that their disagreement over the dangers of secondhand smoke will become the centerpiece of the trial. But the powerful evidence in the new reports damning secondhand smoke suggests that, outside the courtroom, there is nothing left to debate.

By Paul Raeburn in New York, with Gail DeGeorge in Miami

The Toll of Secondhand Smoke

DISEASE	ANNUAL U.S. DEATHS OR CASES
LUNG CANCER	3,000 deaths
HEART DISEASE	35,000-62,000 deaths
SUDDEN INFANT DEATH SYNDROME	1,900-2,700 deaths
LOW-BIRTHWEIGHT BABIES	9,700-18,600 cases
ASTHMA IN CHILDREN	8,000-26,000 new cases 400,000-1 million cases of existing disease getting worse
BRONCHITIS IN CHILDREN	150,000-300,000 cases 7,500-15,000 hospitalizations 136-212 deaths

DATA: CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

BOMA

187th Annual
Convention &
Exhibition
Building Shows
New York, NY
November 1-5, 1993

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RESOLUTION
BEFORE THE
BOMA BOARD OF GOVERNORS
JANUARY 17, 1993
TUCSON, ARIZONA

Whereas, indoor air quality has been the focus of increased media, legislative and regulatory attention for the past several years, with expectations that the intensity of that attention will significantly increase in the months and years ahead.

Whereas, indoor air quality, as a market place demand within the commercial real estate industry, requires no regulation, but requires much information to address this situation effectively and efficiently.

Whereas, BOMA members have long pushed for further research on the sources and causes of indoor air quality problems, and we are adamant about the need for good guidance. We have worked with industry groups, environmental organizations and government officials in coordinating our efforts. We have also demonstrated a strong campaign to develop and distribute sound guidance information to prepare and improve the indoor air quality management programs in the commercial property arena.

Whereas, many legislative and regulatory efforts are underway to dilute or redistribute the sources of indoor air contaminants.

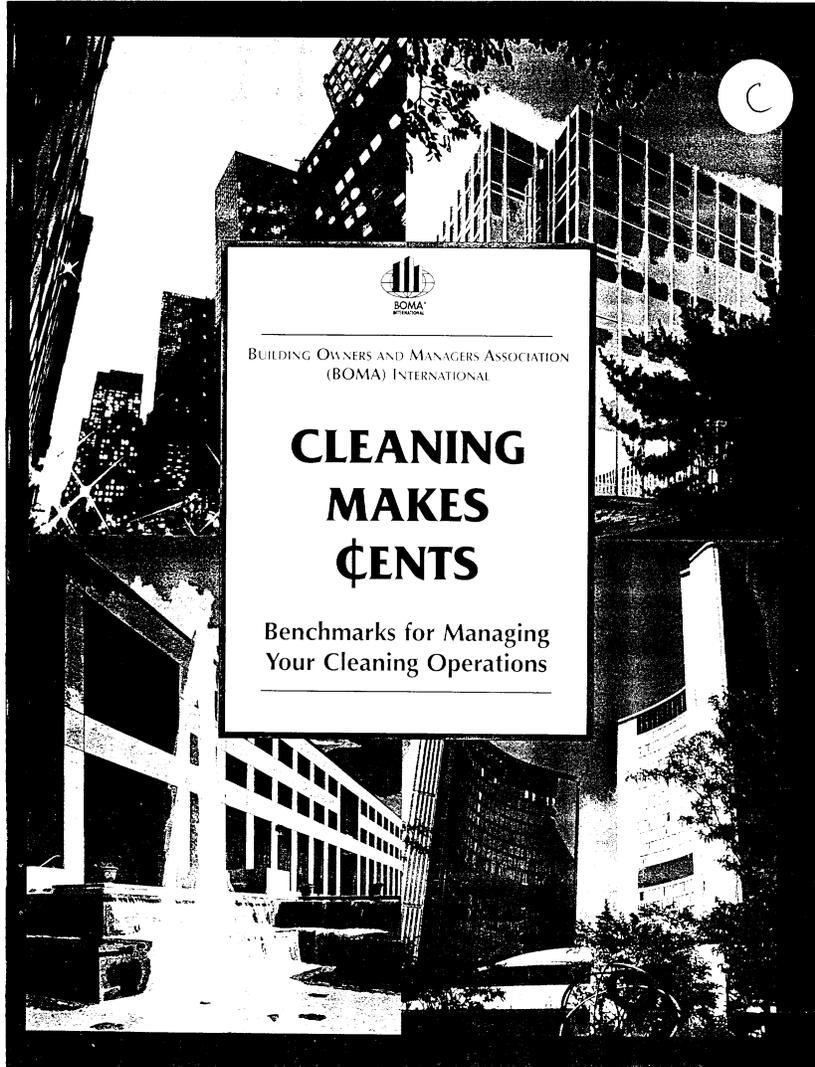
Whereas, BOMA firmly believes that the most effective course of action is to prevent contaminants from being introduced to the workplace in the first place.

Whereas, tobacco smoke has been identified as a leading cause of indoor air contamination, and has generated a great deal of concern within the medical/health community.

Whereas, in light of the EPA's recent classification of second-hand tobacco smoke as a "Class A" carcinogen, BOMA is even more concerned with the consequences to the health and well-being of office tenants, their employees and guests who are exposed to second-hand tobacco smoke in the workplace.

Be It Therefore Resolved, that BOMA would support a federal ban on smoking in the workplace, as part of an overall effort to improve the indoor environment. We do, however, have several concerns with a federal ban - first and foremost among them is that the enforcement of any ban should not be the responsibility of the nation's building owners and managers. The second concern is that any liability incurred must not apply to the owners and managers of commercial, rentable real estate when smoking does occur after a ban is imposed.

B



Building Smoking Policy

It appears that even though smoking in the workplace is not banned in all states, building owners and managers are taking the issue into their own hands. Only 1% of the respondents to the Cleaning survey indicated that smoking was allowed anywhere in the building. In buildings where smoking was allowed in designated areas only, the most common smoking area was outside the building/loading dock. Table 7-3 summarizes the survey results. Of the 12% of the buildings reporting the use of specially designed rooms with separate ventilation systems, the median cost of a room was \$11,500 (or \$0.06 per square foot of a sampled building).

Table 7-3
Building Smoking Policies

Policy	Percent
Outside building/loading dock	71%
Tenant suites only	29%
Smoking not permitted by building policy	21%
Smoking not permitted by local law	17%
Specially designed rooms	12%
Public areas only	2%
Everywhere	1%

Tobacco Smoke's Effect on Cleaning Services

Smoking is one of the most obvious pollutants for any building. The presence of or banning of smoking within a building changes the routine cleaning tasks and the frequency of these tasks. In a building with a no smoking policy, building owners and managers can expect to observe the following changes in their cleaning routines:

- Eliminating the need to clean ashtrays and cigarette butts;
- Reducing the number of filter changes and cleanings;
- Reducing wall cleaning and painting frequencies due to a decrease in the yellowing of walls over time;
- Reducing the frequency of all horizontal dusting (high dusting, venetian blinds, desks/shelves);
- Reducing vacuuming frequencies.

The elimination of smoking and smoking related cleaning activities on average will reduce a building's cleaning expenses by 10%.⁸

⁸ *Cleaning For Health and Safety - Sales and Technical Program*. Daniels Associates Inc., 1994.

	ALL BUILDINGS		OFFICE BUILDINGS		OFFICE LESS THAN 7		OFFICE GREATER THAN 6 STORIES	
NUMBER OF FIREFIGHTERS INJURED	0	0%	0	0	0	0	0	0
NUMBER OF TENANTS INJURED	0	0%	0	0	0	0	0	0
NUMBER OF BLDG STAFF INJURED	1	100%	0	0	0	0	0	0
NUMBER OF OTHERS INJURED	0	0%	0	0	0	0	0	0
NUMBER OF PEOPLE INJURED BY:								
BURNS	0	0%	0	0	0	0	0	0
FALLING	0	0%	0	0	0	0	0	0
SMOKE INHALATION	0	0%	0	0	0	0	0	0
OTHER	1	100%	0	0	0	0	0	0
NUMBER OF PEOPLE HOSPITALIZED:								
LESS THAN ONE DAY	0		0		0		0	
1 TO 7 DAYS	0		0		0		0	
8 DAYS TO ONE MONTH	0		0		0		0	
MORE THAN ONE MONTH	0		0		0		0	
NUMBER OF FIRES CAUSED BY:								
SMOKING	25	26%	19	28%	1	17%	18	29%
ELECTRICAL	24	25%	18	26%	2	33%	16	26%
MECHANICAL	2	2%	1	1%	1	17%	0	0%
ARSON	7	7%	5	7%	0	0%	5	8%
CARELESS WORKERS	17	18%	13	19%	1	17%	12	19%
SPONTANEOUS	2	2%	1	1%	0	0%	1	2%
UNKNOWN	4	4%	4	6%	0	0%	4	6%
OTHER	14	15%	7	10%	1	17%	6	10%
NUMBER OF FIRES IGNITED IN:								
GARAGE	7	7%	5	7%	1	17%	4	6%
TENANT SPACE	30	32%	26	38%	3	50%	23	37%
ELEVATOR	4	4%	3	4%	1	17%	2	3%
HALLWAY	4	4%	3	4%	0	0%	3	5%
EXTerior	9	9%	7	10%	1	17%	6	10%
RESTROOM	4	4%	3	4%	0	0%	3	5%
ELEC MECH ROOM	8	8%	6	9%	0	0%	6	10%
SERVICE AREA	7	7%	2	3%	0	0%	2	3%
BASINMENT	1	1%	0	0%	0	0%	0	0%
OTHER	21	22%	13	19%	0	0%	13	21%
NUMBER OF FIRES EXTINGUISHED BY:								
FIREFIGHTERS	27	28%	19	28%	2	33%	17	27%
FIRE EXTINGUISHERS	31	33%	18	26%	1	17%	17	27%
SPRINKLER SYSTEM	13	14%	10	15%	1	17%	9	15%
OTHER	24	25%	21	31%	2	33%	19	31%
NUMBER OF FIRES DISCOVERED BY:								
SPRINKLER ACTIVATOR	15	16%	9	13%	1	17%	8	13%
SMOKE DETECTOR	24	25%	16	24%	0	0%	16	26%
HEATED DETECTOR	0	0%	0	0%	0	0%	0	0%
INDIVIDUAL REPORT	52	55%	40	59%	5	83%	35	56%
OTHER	4	4%	3	4%	0	0%	3	5%
AVERAGE SIZE OF FIRE FLOOR								
	25,890		24,628		16,026		25,703	
AVERAGE SQ/FT DAMAGED:								
BY WATER	3,930	43%	3,411	47%	1,000	44%	3,596	47%
BY SMOKE	4,536	50%	3,599	50%	1,033	46%	3,777	50%
BY FIRE	570	6%	214	3%	219	10%	214	3%
NUMBER OF TIMES ALARM/SPRINKLER SYSTEM:								
WORKED	57	61%	36	55%	2	33%	34	57%
DID NOT WORK	3	3%	2	3%	0	0%	2	3%
NOT APPLICABLE	33	35%	28	42%	4	67%	24	40%
NUMBER OF TIMES SUPPRESSION SYSTEM:								
WORKED	34	37%	19	28%	1	17%	18	30%
DID NOT WORK	1	1%	1	2%	0	0%	1	2%
NOT APPLICABLE	58	62%	46	70%	5	83%	41	68%
NUMBER OF TIMES SPRINKLER/SUPPRESSION SYSTEM:								
WORKED	1	1%	0	0%	0	0%	0	0%
DID NOT WORK	0	0%	0	0%	0	0%	0	0%
NOT APPLICABLE	89	99%	83	100%	6	100%	57	100%



PREPARED STATEMENT OF MICHAEL STERNBERG, NATIONAL RESTAURANT ASSOCIATION

Good afternoon, Mr. Chairman and members of the committee. My name is Michael Sternberg and I am the owner and operator of Sam & Harry's restaurants in downtown Washington DC, and at Tyson's Corner, as well as the Music City Roadhouse in Georgetown. I am also a board member of the National Restaurant Association and it is on their behalf that I appear here today. I would like to thank you for allowing me to testify on the subject of environmental tobacco smoke.

Smoking is an emotional issue, but I hope that we can set aside emotions today and look at this issue from a logical standpoint. Simply put, I believe that res-

taurateurs like myself, and not the government, should be making the decisions that impact our businesses.

If a restaurateur attracts customers to his or her restaurant that don't smoke and don't like to be around tobacco smoke, then it makes sense that the restaurateur would ban smoking from all or part of his or her establishment. But if a restaurateur has a clientele whose majority consists of smokers, then it would be foolish for him or her to ban smoking entirely from the establishment.

You see, by their very nature, restaurants are in the business of offering choices to their patrons, and every effort is made to ensure that the dining experience is enjoyable. To that end, many members of the National Restaurant Association have elected to ban smoking in their establishments while most others have provided separate sections for smokers and non-smokers. It's a choice, and it's one that should be left to the individual restaurateur.

While reducing smoking is arguably a laudable goal, the difficulty when it comes to the restaurant industry is where to draw the line. One suggested approach has been to ban smoking in "fast food" restaurants. But can those places be defined in a way that does not include barbecue restaurants and others who happen to serve customers by way of a take-out window? Another approach has been to ban smoking in restaurants but to exclude areas that serve as bars—an approach that could lead to more liquor licenses being demanded. Still another approach being considered would ban smoking except in the tiniest bars—essentially allowing smoking in only the most restricted of spaces. Still another approach has been for Congress to force the Occupational Safety and Health Administration (OSHA) to make the decision by promulgating its final rule on indoor air quality. Defining the industry and where to draw the line is difficult. Again, we say leave it to the restaurant owner and his or her customers to decide.

A final point that I wish to make is to cite the impact of smoking on travel and tourism. Restaurants account for the single largest industry among the tourism industries. We represent nearly 800,000 eating-and-drinking establishments and food service institutions. Of these establishments, approximately 400,000 are restaurants, and roughly 250,000 of those are single, independent operators. You could say that we are a large industry dominated by small businesses. We would not survive and thrive if it were not for the business that is generated by tourism. Indeed, I operate my restaurants in a city that is well recognized for tourism.

Last year the United States hosted a record 24.2 million overseas visitors, a seven-percent increase over 1996, according to the U.S. Commerce department. Tourism is one of the nation's largest exports, contributing nearly \$79 billion to the U.S. economy. At a time when we are asking tourists to come to the United States to spend their hard-earned vacation money or to come here as business travelers, we are discouraging them with our smoking policies. This is inconsistent and we believe it will cause a loss of jobs for tourism industries like the restaurant industry and a loss of tourism dollars for the nation's economy.

We believe, Mr. Chairman, that the market is working as it should to determine individual restaurant smoking policies. No blanket government directive is needed. This is particularly true since it is individual citizens who decide which restaurants to frequent. They are free to choose restaurants that reflect their own tastes with regard to food, ambiance, convenience, as well as smoking policy.

Thank you again for giving me the opportunity to appear before you today.

The Hon. JOHN CHAFEE, *Chairman,*
Senate Committee on Environment and Public Works,
Washington, DC.

DEAR SENATOR: I am writing to request that you enter the enclosed written testimony into the record for the April 1 Senate Hearing on Environmental Tobacco Smoke. I am also faxing the testimony today to the Senate Committee on Environment and Public Works.

As Congress is considering comprehensive tobacco legislation, it is imperative that the pervasive problem of ETS exposure is given full attention. Action by the Federal Government to protect American workers and families from the physical and psychosocial consequences of ETS exposure has been long overdue.

The present moment offers a unique opportunity to make good on past omissions and stop the unconscionable injury inflicted by ETS exposure on the nonsmoking majority of the people of this Nation. Your dedication to this cause will be greatly appreciated.

Sincerely,

K.H. GINZEL, MD,
Professor.

To: Senate Committee on Environment and Public Works, Senate Hart Building, Room 407, Washington, DC. 20510

From: K.H. Ginzel, MD, Professor of Pharmacology and Toxicology Emeritus, University of Arkansas for Medical Sciences

Re: Written testimony for the Senate Hearing on ETS, April 1, 1998

The present focus of projected Federal tobacco legislation is on smoking, in particular smoking in children, while the hazard of breathing the smoke of others, i.e., environmental tobacco smoke (ETS), is largely ignored.

Since 1992, when the Environmental Protection Agency designated ETS as a Class A Human Carcinogen (like asbestos, arsenic, benzene, etc.), additional evidence for the deleterious effects of ETS has accumulated at an increasing rate.

Most importantly, one of the major lung carcinogens in tobacco smoke, NNK, has been identified in the body of individuals who were exposed to ETS. This finding complements and strengthens the host of epidemiologic studies that have established incontrovertible proof of a cause-effect relationship between ETS exposure and disease. After active smoking and alcohol, ETS now ranks as the third leading preventable cause of death in our society.

Although lung cancer is the most dreaded consequence, heart disease exceeds the former in the sheer number of cases, boosting the latest estimate of ETS-related fatalities in this country alone to about 60,000 per year, according to a recent comprehensive analysis by the California EPA. A study published in the Journal of the American Medical Association presented evidence that active as well as passive smoking leads to an irreversible thickening of arteries, an indicator of atherosclerotic progression. Two alarming reports even implicate both active and passive smoking in the causation of breast cancer in about half of Caucasian women due to protracted detoxification of certain aromatic amines hitherto only associated with bladder cancer.

Smokefree air is especially important for children, born and unborn. Passive smoking during pregnancy inflicts two thirds of the harm caused by active smoking, which consists, among others, in low birth weight, perinatal death, and cognitive and behavioral deficits. During infancy respiratory disease is significantly increased. ETS-exposed children also have a 2-4 fold higher incidence of leukemia and may die later in life from lung cancer as a consequence of the exposure in childhood.

There is no question that smoking, i.e., 'voluntary' smoking, kills about seven times as many Americans as does involuntary smoking: 430,000 as compared to approximately 60,000 each year. But we have to look beyond priorities in numbers.

Involuntary, or passive, smoking is not just a health issue. Inevitably, it also invokes ethical as well as legal aspects. Obviously, it is one thing for a smoker to die from lung cancer or any other smoking-related disease, but quite another for a non-smoker to succumb to an illness, fatal or otherwise, that was inflicted by someone else. People harmed by ETS on the job may seek redress for the injuries to their health from employers who have allowed smoking in the workplace. The case of restaurant employees is especially serious as their exposure to tobacco smoke has been found to be far greater than in any other occupational setting.

Admittedly, even in the case of the smoker voluntariness must be qualified. Since almost 90 percent of all adult smokers started as children, who may have been lured by the deceitful promises and the slick imagery of advertising, compacted into what is amiably called 'peer pressure', the buzzwords 'adult choice' are dubious at best. However, since addiction does NOT compel smokers to smoke indoors in the presence of nonsmokers, they do have the choice not to expose others. Hence, there is no valid excuse to involve innocent bystanders, especially children and pregnant women, when the outdoors is vastly bigger than all enclosed areas put together.

Regrettably, because smokers are constantly provoked by the tobacco industry and its front groups to insist on their so-called right to smoke anywhere and anytime, nonsmokers still depend on government to protect them from ETS exposure. In fact, being exposed to the smoke of others differs from actively smoking only in intensity of exposure. Thus, not granting a smokefree environment is tantamount to making smoking mandatory for everyone. Indeed, there are few adults or children who do not have nicotine and other poisons present in smoke in their blood.

If smokers claim a 'right' to smoke indoors, such 'right' obviously harms the non-smoker. On the other hand, the right of nonsmokers to air unpolluted by tobacco smoke does not harm the abstaining smoker. In short, smoking hurts nonsmokers, but nonsmoking does not hurt smokers.

Actually, indoor smoking bans benefit smokers in two ways. Those who are struggling to give up will be less tempted to relapse in an environment that is smoke-free, while smokers who continue to smoke can at least avoid the hazard of breathing the sidestream smoke of their own and their fellow smokers' cigarettes or cigars.

But there is more to ETS than physical harm. First, the pervasive visibility of smoking in public places as well on TV and in movies portrays smoking as a normal social behavior, modeling negatively for the growing child and adolescent who learn by imitating adults. This is why the nonsmokers' rights movement was rightly judged by Big Tobacco as The most dangerous development to the viability of the tobacco industry that has yet occurred (1978 Roper Report). Here is the link between involuntary and voluntary smoking, the former leading to the latter. Smoking in public view helps program and procure the next generation of smokers, smoking feeding on smoking, literally perpetuating the vicious circle.

Another sequel to permitting public smoking is the loss of a valuable opportunity to signal to the smoker that both active smoking and passive smoking are harmful. Parents who cannot light up in restaurants may think twice before doing so in their home or car. The fact that smoking is still allowed in many indoor environments implies for adults and kids that it really cannot be that bad. "Say NO to drugs, but say YES to tobacco" has been the perennial message of the cigarette pushers AND, until now, of the Establishment as well.

Thus, smoking in public not only recruits the young, but also assures that current smokers remain loyal consumers. It opposes our efforts and diminishes success in smoking prevention and smoking cessation. The need to provide a smoke-free environment is therefore not less important than the need to treat the smoker and prevent children from starting to smoke. Both are integral parts of one and the same problem and should not be separated from each other.

The main obstacles to ban smoking indoors are (1) concerns that, despite ample evidence to the contrary, business could suffer, as in the case of bars and restaurants, and (2) the continued denial, fostered by the tobacco industry, that ETS is a serious health hazard. It is this denial that makes the smoker, especially the militant smoker, insist on the fictitious right to smoke wherever (s)he pleases.

We have failed to educate the general public about the full range and magnitude of the devastating health effects of tobacco use in all its forms and will continue to fail unless we attack the leading public health problem of our time in its entirety. By dividing it up, we will be defeated. We have failed to convince smokers that exposing others (and themselves) to smoke in enclosed air spaces can cause injuries to their health no less severe, albeit delayed and of different kind, than can be caused by driving under the influence of alcohol or illicit substances. I am confident that the majority of smokers, once they have internalized this message, will no longer insist to smoke in the presence of nonsmokers as no one today claims the right to drive while intoxicated; business concerns will then also be laid to rest.

All this has to be impressed upon Congress, so that the need of protecting Americans from exposure to a major environmental poison and its psychosocial implications is fully recognized as an urgent goal of Federal legislation.

K.H. GINZEL, MD.

NEW JERSEY GASP (GROUP AGAINST SMOKING POLLUTION),
April 9, 1998.

Senator JOHN CHAFEE,
Senate Committee on Environment and Public Works,
Washington, DC.

DEAR SENATOR CHAFEE: As you consider ETS issues, following your April 1 hearing, I would like you to know that smokefree policies are eminently possible in all workplaces and public places. Smokefree Air Everywhere (enclosed) tells success stories from restaurants, bars, country clubs, malls, outdoor venue, even drug treatment facilities.

As you can see from our other publications, smokefree dining is desired by the majority of our citizens. Most workplaces are already smokefree, and restaurants and bars as worksites should also be smokefree for the benefit of their employees and customers. Exposure to environmental tobacco smoke in restaurants is 3-5 times higher than typical workplace exposure, and 8-20 times higher than domestic exposure (living with a smoker).

Please enter our materials into the record on this issue. I believe they make it perfectly clear that Congress would do nothing impossible by mandating smokefree air in all workplaces and public places. Indeed, it's long overdue. The private sector is way ahead of our legislators increasing protections for the public.

Sincerely,

REGINA CARLSON,
Executive Director.

SMOKEFREE AIR EVERYWHERE: WHY AND HOW FOR DECISION MAKERS IN
WORKPLACES AND PUBLIC PLACES

INTRODUCTION

Surrounded by scientific studies, newspaper articles, and smokefree policy statements from employers, shopping malls, sports stadiums, restaurants, airports, and others, I find myself working on my fourth smokefree policy guide in 18 years. This guide updates *On The Air* (1991), which updated *Toward a Smokefree Workplace* (1985), which succeeded *The Case for a Smokefree Workplace* (1979). Each has needed replacing for the happy reason that new information and attitudes have produced steady progress in securing smokefree environments.

What has changed during these years? Then, we had less evidence that smoking hurts nonsmokers. Now, we have abundant information to compel policymakers, legislators, and courts throughout the United States and around the world to make decisions to limit the harmful effects of tobacco. Then, tobacco controls were almost unthinkable. I remember one of my first encounters with a legislator. He thundered at me, "You can't ask people not to smoke!" Now, legislators say, "Of course, we should eliminate smoking in public places." (That "of course" represents years of work.) More than a decade ago, we were concentrating on offices and factories as workplaces. Today, we recognize that almost every public place is someone's workplace and that people need smokefree air when dining, shopping, or attending entertainment events as well as at work.

What hasn't changed? Many people still suffer needless health hazards from tobacco smoke pollution at work and in public places. There still is a need for information and encouragement to create healthful environments. And the methods for initiating smokefree policies still are much the same.

I understand the hesitation people feel when they first consider establishing smokefree policies. Like many of the people I have worked with, I grew up accepting smoking as a normal part of life. My parents smoked. My uncles and aunts smoked. Some of the earliest Christmas presents I bought with "my own money" were cartons of Chesterfield cigarettes. My high school debate team coach, one of my favorite teachers, even offered me and my fellow teammates cigarettes. We accepted them. We smoked them. We felt so sophisticated.

But those old attitudes and behaviors, carefully nurtured by the tobacco industry, are crumbling in the face of health information and citizen activism. The number of smokefree workplaces and public places has increased in response. These smokefree environments, in turn, have served as good examples, making it easier for more places to become smokefree.

One constant that has delighted me through the years is the happy surprise expressed by people who have created smokefree policies. Again and again they say, "It was much easier than we thought it would be. We should have done it years ago." You, too, can have that success and pleasure. This guide was created to ensure that you do. Good luck. And, to your good health!

HEALTH

"Tobacco is the single, chief, avoidable cause of death in our society, and the most important public issue of our time."—C. Everett Koop, M.D., former Surgeon General of the United States.

Enormity

"Everyone knows" that smoking is hazardous to the health of smokers and nonsmokers. But most people don't realize how enormous the problem is. Almost a half million Americans die each year because they smoke tobacco or breathe secondhand smoke.

Government and other health sources estimate between 420,000 to 500,000 deaths annually—one in five deaths—result from smoking. This makes smoking the No. 1 cause of death in the United States. All this death is preventable, premature, unnecessary death.

Secondhand smoke causes as many as 53,000 deaths each year. In fact, secondhand smoke is now the No. 3 cause of preventable, premature death in the United States, killing as many people as alcohol-related motor vehicle accidents.

Tobacco kills more Americans than alcohol, illegal drugs, homicide, suicide, automobile accidents, fires, and AIDS combined.

Environmental Tobacco Smoke

The U.S. Environmental Protection Agency (EPA) issued a long-anticipated report on environmental tobacco smoke (ETS) in January 1993. That report, *Respiratory Health Effects of Passive Smoking*, concluded that ETS—also referred to as second-

hand smoke—is responsible for approximately 3,000 lung cancer deaths each year in nonsmokers and impairs the respiratory health of hundreds of thousands of children. No single report has had such an impact on public awareness about tobacco since the original 1964 Surgeon General's Report concluded that smoking was a major cause of lung cancer.

The EPA report officially categorized ETS as a known human carcinogen, placing ETS in the Class A (most dangerous) category, reserved for only a few toxic substances including radon, benzene, and asbestos. The report also identified ETS as a cause of serious respiratory illness in children, including bronchitis, pneumonia, asthmatic episodes, new cases of asthma, and sudden infant death syndrome. A later report, published in the *Journal of the American Medical Association* (June 1994), established that nonsmokers exposed to ETS at work were 39 percent more likely to get lung cancer than nonexposed nonsmoking employees.

Although the EPA report brought the issue of secondhand smoke into the media spotlight, it is only the best known among a number of authoritative reports on ETS, including the 1986 Surgeon General's Report and a report of the National Academy of Sciences. The EPA study limited itself to the effects of tobacco smoke pollution on respiratory conditions. Other scientific studies and reports have examined the effects of secondhand smoke on heart disease, cancers other than lung cancer, and other diseases, as well as effects on children, on individuals with pre-existing health problems, and on people with exposure to other risks.

Cardiovascular disease is the leading cause of death in the United States. A landmark position paper by the Council on Cardiopulmonary and Critical Care of the American Heart Association (1992) concluded that each year, 35,000 to 40,000 people die from cardiovascular disease caused by ETS. The *Journal of the American Medical Association* (JAMA) published a review (April 1995) which reported the mechanisms by which ETS causes heart disease. Written by two professors of medicine in the Cardiology Division at the University of California School of Medicine, the investigation was based on almost 100 scientific studies, reported in peer-reviewed journals, worldwide, since 1990. It analyzed those studies and concluded that ETS reduces the ability of the body to deliver oxygen to the heart and the ability of the heart to use oxygen. ETS increases platelet activity, accelerates atherosclerotic lesions, and increases tissue damage following heart attacks. These effects are caused by a number of mechanisms, which are responses to the hundreds of toxins in tobacco smoke (including carbon monoxide, nicotine, and polycyclic aromatic hydrocarbons).

Nonsmokers are more sensitive to many of these poisons than smokers. (The authors pointed out that "cigarette equivalents" created by the tobacco industry are not appropriate for calculating nonsmokers' risks. Please see The Tobacco Industry section for more information on "cigarette equivalents.") One dramatic illustration of the effects of ETS on nonsmokers, from that JAMA study: "Healthy young adults exposed experimentally to secondhand smoke . . . took as long as people with heart disease to recover their resting heart rate following exercise." The JAMA study estimated 30,000 to 60,000 nonsmokers die each year because of ETS-caused heart disease and three times that many people have nonfatal heart attacks as a result of ETS exposure.

ETS is linked to other cancers, including cervical cancer. ETS-caused cervical cancer is believed to result from toxins carried in the blood that accumulate in the cervix. The incidence of cervical cancer among nonsmoking flight attendants was one reason flight attendants fought vigorously for smokefree flights. *Circulation*, the journal of the American Heart Association, reported that more than 10,000 people die every year from cancers (other than lung cancers) caused by ETS (January 1991).

Children at Risk

Once upon a time, miners used to take caged canaries down into the mines. Sensitive detectors of bad air, the canaries would keel over in dangerous conditions, giving an early warning to the miners. Like those caged birds, children and fetuses are often exposed, against their will, to tobacco poisons; and they are more affected than adults because their bodies are small and still developing. Documentation of the risks of ETS pollution and maternal smoking to children and fetuses has accumulated and is finally reaching the public.

Financial expert and author Andrew Tobias has been impressed by the data and has used his skill and position to bring the information to citizens. In 1991 Tobias wrote the text to Kids Say Don't Smoke, which was illustrated with children's artwork from the New York City smokefree ad contest. Tobias sent the book to 100,000 customers of his Managing Your Money program. His subscribers learned that infant deaths can be attributed to maternal smoking and that a Swedish study on

sudden infant death syndrome (SIDS) found that smokers of fewer than 10 cigarettes a day were twice as likely as nonsmokers to have their babies die of SIDS. Heavier smokers were three times as likely to have their babies die of SIDS.

SIDS is only one of many health consequences children may experience as a result of maternal smoking. Other studies indicate that children born to mothers who smoke, compared to children born to nonsmoking mothers, are:

- more likely to suffer low birth weight
- more likely to be born with cleft lips and palates
- more likely to be born mentally retarded
- more likely to suffer attention deficit hyperactivity disorder
- slower in reading and mathematical attainment, and
- more likely to die in infancy.

Even secondhand smoke can affect the outcome of pregnancy. Children aged six to 9 years old, born to women exposed to ETS during pregnancy, experience more academic and behavioral problems than children whose mothers weren't exposed, according to a 1991 study conducted at Carleton University, Ottawa, Canada. Researcher Judy Makin reported that many of the mothers in the study were exposed to cigarette smoke only at work. A growing body of information links ETS exposure of nonsmoking women during pregnancy with pregnancy complications, low birth weight babies, and infant death.

Early in 1995, two studies attracted wide media attention. One (JAMA, March 8) examined the relationship between SIDS and ETS, noting that SIDS is the most common cause of death in infants, causing 50 percent of deaths among babies two to 4 months old. The JAMA study, conducted by the Department of Family and Preventive Medicine at the University of California, San Diego, compared 200 babies who died of SIDS and their families, with 200 control families, carefully controlling for many variables. The study determined that smoking by the father, the mother, or others around the baby increased the risk of SIDS, and the more a baby was exposed to ETS, the greater the incidence of SIDS. The study also linked secondhand smoke exposure of the mother during pregnancy to increased SIDS.

The second study (*Journal of Family Practice*, April 1995) comprehensively reviewed the effects of maternal smoking and ETS on pregnancy complications and SIDS. Like the JAMA study on ETS and heart disease, this study reviewed all studies worldwide, numbering nearly 100, including some from as far away as Tasmania. The authors, Joseph DiFranza, M.D. and Robert Lew, Ph.D., an associate professor of medicine at the University of Massachusetts and a statistician at Brigham and Women's Hospital, Boston, estimated that tobacco use is responsible for 1,900 to 4,800 infant deaths from perinatal disorders and 1,200 to 2,200 deaths from SIDS. "At least three times as many infants die of SIDS caused by maternal smoking as are killed as a result of homicide or child abuse," wrote the authors. "While deliberate violence and abuse are very serious concerns, cigarettes kill many more children."

A second report by the same authors examined the effects of ETS on disease and death of children. It found that, "Each year, among American children, tobacco is associated with an estimated 284 to 360 deaths from lower respiratory tract illnesses and fires initiated by smoking materials; over 300 fire-related injuries; 14,000 to 21,000 tonsillectomies and/or adenoidectomies; 529,000 physician visits for asthma; 1.3 million to 2 million visits for cough; and, in children under 5 years, 260,000 to 436,000 episodes of bronchitis and 115,000 to 190,000 episodes of pneumonia." DiFranza and Lew pointed out that much of the exposure of children was not from parental smoking, but occurred in schools, child care facilities, and other public places.

An English study reinforced findings about SIDS. At the Royal Hospital for Sick Children, Peter Fleming, a professor of infant health, reported that the risk of crib death (SIDS) doubles for each hour a day a baby spends in a room where people smoke. "We were astonished by the strength of the association. . . . it is as anti-social to smoke in a room where there are pregnant women and babies as it is to drink and drive," said Professor Fleming, adding, "Having a Dad or anyone else in the household who smokes is almost as big a risk as having a mother who smokes." (*British Medical Journal*, July 27, 1996)

Adolescents who live with smoking parents are at higher risk of heart disease because ETS apparently lowers their levels of HDL (good cholesterol). Marc Jacobson of the Albert Einstein College of Medicine wrote that "Passive smoke gives teenage girls the higher coronary risk of a man and raises boys' risk too." (*Pediatrics*, 1991)

One expert who puts the issue of children and ETS into perspective is Dr. William G. Cahan, now surgeon emeritus at Memorial Sloan-Kettering Cancer Center, who saw the consequences of children's exposure to ETS every day. "Young, growing tissues are much more susceptible to carcinogens than adult tissues are," says Dr.

Cahan. "Bringing up a child in a smoking household is tantamount to bringing him or her up in a house lined with asbestos and radon."

Synergy

Secondhand smoke is an environmental pollutant and it interferes with the human body's ability to resist some other environmental pollutants. For instance, it vastly increases the hazards of radon exposure. Some individuals are more sensitive than others. Contact lens wearers report increased eye irritation when exposed to tobacco smoke. Many nonsmokers exposed to tobacco smoke suffer immediate symptoms including breathing difficulties, eye irritation, headache, nausea, and allergy attacks; these responses exacerbate problems with other pollutants. For people with significant health problems such as asthma or heart disease, the effects of smoke exposure, added to their other health problems, can range from uncomfortable to life-threatening. (Please see the Safety section for information on ETS and occupational exposures.)

ETS: Potent and Pervasive

One reason ETS causes so much illness, disease, and death in nonsmokers is that it is a potent mix of poisons. Cigarette smoke contains more than 4,000 chemicals; more than 200 are toxins. Among them are arsenic, benzene, carbon monoxide, formaldehyde, hydrogen cyanide, lead, mercury, and vinyl chloride. Approximately 60 substances found in tobacco smoke are known to initiate or promote cancer. Many of these substances are present in higher concentrations in secondhand smoke than in the smoke inhaled directly from a cigarette.

Another reason ETS has such an impact on health is that tobacco smoke pollution is pervasive in American society. Shortly after the EPA report was released, the Centers for Disease Control and Prevention reported that its testing of 800 people, aged 4 to 91, showed that all had signs of recent nicotine exposure whether they smoked or not—indicating the ubiquity of ETS. In 1989, a similar study by the Roswell Park Cancer Institute found 91 percent of nonsmokers had cotinine, the major metabolite of nicotine, in their urine. Even among those who did not live with a smoker, 84 percent had detectable levels of cotinine in their urine samples.

This same phenomenon was investigated in the workplace. The U.S. Environmental Protection Agency and the Naval Research Laboratory determined that secondhand smoke in the workplace typically poses levels of risk far beyond what the Federal Government allows for other cancer-causing substances. This was found to be true for white collar, blue collar, and restaurant service workers. Based on data from 4,000 employees, the level of cotinine found in the blood and urine of typical nonsmokers indicated secondhand smoke lung-cancer risks thousands of times greater than the acceptable level for other carcinogenic residues in air, water, or food. Researchers concluded that measures short of banning smoking in buildings were unlikely to result in acceptable levels of risk, due to the difficulty and expense of completely isolating smoking areas from nonsmokers' air.

While information accumulates, risks remain. In the September 27, 1995 issue of JAMA, S. Katherine Hammond and colleagues at the University of Massachusetts Medical School reported that their study, placing fiber disks treated to react to nicotine at each of 25 work sites (including fire stations, newspaper publishing plants, and textile plants; in offices, cafeterias, and production areas), showed many employees still exposed to ETS at levels that increased the risk of lung cancer.

Authorities Agree

This is a sampling of the information on ETS that has led virtually all major health authorities, worldwide, to conclude that ETS causes disease and death. Health and scientific authorities that have reached this conclusion include:

- American Cancer Society
- American Heart Association
- American Lung Association
- American Medical Association
- Harvard School of Public Health
- International Agency for Research on Cancer
- National Academy of Sciences
- National Cancer Institute
- National Institute for Occupational Safety and Health
- U.S. Department of Health and Human Services
- U.S. Environmental Protection Agency
- U.S. Office on Smoking and Health
- U.S. Public Health Service
- U.S. Surgeon General
- World Health Organization.

Smoking

Smoking is the No. 1 preventable cause of premature death in the United States. It increases:

- coronary heart disease
- lung cancer
- cancers of the skin, lip, mouth, throat, stomach, kidney, pancreas, bladder, colon, rectum, anus, cervix, vagina, uterus, penis
- leukemia
- chronic bronchitis, emphysema, and asthma
- stroke, Buerger's disease
- complications of diabetes
- stomach and duodenal ulcers, Crohn's disease
- periodontal disease
- osteoporosis, osteoarthritis, disc degeneration
- risks of the use of oral contraceptives
- impotence, infertility, early menopause
- spontaneous abortions, stillbirths
- surgical complications, delayed wound healing, amputations
- cataracts, glaucoma, blindness
- wrinkles, psoriasis
- snoring, hearing loss.

The risks of smoking are so great that half the people who continue to smoke will be killed by an illness caused by their smoking. The consequences of smoking are vast for the same reasons that the consequences of secondhand smoke are vast:

First, tobacco's many potent poisons can affect many organs in the human body, increasing the incidence and severity of disease. The popular perception is that cancer is the most common health consequence of smoking. In reality, it is more likely that a smoker will die of heart disease because lung cancer usually takes longer to develop than cardiovascular disease. As one thoracic physician said, when asked why all smokers don't get lung cancer, "Most of them die of a heart attack first."

Heart disease is the leading cause of death in America, and smoking is estimated to be responsible for one-fifth of heart disease deaths in smokers. Stroke is the third leading cause of death, and smokers have approximately twice the risk of non-smokers.

And smoking does fill the oncology units of hospitals. Smoking causes one-third of all cancer deaths and is responsible for nearly all lung cancer. Lung cancer now kills more Americans than any other cancer, recently overtaking breast cancer as the No. 1 cancer killer of women. Smoking is responsible for other lung diseases, too, including 80 percent of bronchitis and emphysema—major killers and major causes for disability retirements. Chronic obstructive pulmonary diseases such as bronchitis and emphysema are the fifth leading causes of death in the Nation.

The second reason the consequences of smoking are so massive is that smoking is widespread. Almost a quarter of American adults smoke, a veritable epidemic of nicotine addiction.

SAFETY

"My uncle hid in a closet to smoke in our house. The clothes caught on fire and our house burned down."—Fifth grader from New York, quoted in *Kids Say Don't Smoke*

Playing with Fire

Fires started by cigarettes are the leading cause of fire death in the United States. Smoking and smoking materials caused 151,900 fires in buildings, vehicles, and outdoors in 1993, the most recent year for which data are available from the National Fire Protection Association. Those fires killed 1,029 people and injured 3,496 people (not including firefighters). One-third of the people killed and injured in cigarette-caused fires are nonsmokers, according to one estimate.

One reason for the magnitude of cigarette-caused fires parallels a reason for the magnitude of the health impact of smoking: cigarettes are widely used.

But, unlike the health hazards of cigarettes, which are inherent in the product, the fire hazards could be reduced. All but one or two cigarettes on the market are specifically designed to smolder for a long time whether smoked or not. Cigarettes would be self-extinguishing if tobacco was not treated with chemicals and rolled in special porous paper. Tobacco companies know how to reduce the fire hazards of cigarettes. But manufacturers continue to produce cigarettes that smolder because they increase sales. And tobacco company representatives continue to insist that

cigarettes are not the problem. Instead, they assert that furniture, mattresses, and children's pajamas and nighties should be more fire resistant.

Accidents

Smoking is associated with increased rates of accidents, including on-the-job accidents and auto accidents. The National Institute for Occupational Safety and Health reports that workers who smoke have twice as many on-the-job accidents as workers who don't smoke.

Several auto insurance companies have determined that their policy holders who smoke have up to 2.6 times as many auto accidents as policy holders who don't smoke. Smokers are 50 percent more likely than nonsmokers to be cited for traffic violations and to be involved in auto accidents, according to a study published in the *New York State Journal of Medicine*.

Some possible explanations: Chemicals in cigarettes may affect reaction time, reduce night vision, and restrict field of vision. Lighting up or using an ashtray may distract drivers. And smokers simply may be more willing to take risks while driving—including running red lights. As a group, smokers are less educated than nonsmokers and tend to engage in more high-risk behaviors, such as not wearing seat belts, not exercising, and not being careful about diet.

Statistics offer an explanation, too. Whenever people are sorted into two groups, smoking and nonsmoking, almost all the alcoholics and illegal drug users fall into the smoking group (because of the powerful association of tobacco with other drug use).

The presence of those alcoholics and illegal drug users raises the accident rate.

Occupational Hazards

Smoking increases the hazards of occupational exposures for both smokers and nonsmokers because tobacco smoke often acts synergistically with other pollutants.

One defense the human body has against the effects of pollutants is the action of cilia—tiny, hair-like projections that line the airways. Normally, these cilia sweep foreign particles out of the respiratory system. But tobacco smoke immobilizes them. Tobacco also can act as a vehicle for other pollutants. In the case of some industrial diseases, tobacco smoke particles pierce the walls of the alveoli, tiny sacs in the lungs, and allow other damaging materials to enter.

These are two of the known physiological mechanisms that make the combination of tobacco smoke and other environmental pollutants particularly dangerous. Other mechanisms are still under research or are yet to be discovered. But the results are clear. Some findings:

- Tobacco smoke in the air complicates any problems already existing in office workplaces for smokers and nonsmokers, including fumes from reproduction fluids, formaldehyde insulation, and other pollutants.
- Asbestos workers who smoke are 92 times more likely to develop lung cancer than nonsmoking asbestos workers.
- Uranium miners who smoke have 10 times the lung cancer risk of nonsmoking uranium miners.

LEGISLATION, REGULATION, AND LITIGATION

"The company already has in effect a rule that cigarettes are not to be smoked around telephone equipment. The rationale behind the rule is that the machines are extremely sensitive and can be damaged by the smoke. Human beings are also very sensitive and can be damaged by cigarette smoke. Unlike a piece of machinery, the damage to a human is all too often irreparable. If a circuit or wiring goes bad, the company can install a replacement part. It is not so simple in the case of a human lung, eye, or heart. . . . A company that has demonstrated such concern for its mechanical components should have at least as much concern for its human beings."—Judge PHILIP A. Gruccio, New Jersey Superior Court; *Shimp v. New Jersey Bell Telephone Co.*, 1976

As this publication goes to press, there is a plethora of legal activity on tobacco in legislatures and court rooms throughout the United States. Nineteen States and at least 19 counties and cities, including Los Angeles, San Francisco, and New York City, are suing tobacco companies to recover government Medicare and Medicaid costs for treating tobacco-related health problems. One jury has awarded a smoker \$750,000 and more than a dozen cases are scheduled for trial within a year. The Food and Drug Administration has asserted authority over cigarettes as drug delivery devices.

Thirty-five local governments have enacted restrictions on tobacco advertising on billboards, on government property, or at point of sale. Almost 200 municipalities have banned cigarette vending machines; nearly as many have restricted their use;

and well over a hundred municipalities have eliminated tobacco self-service sale displays. In New Jersey, during 1994–1996, municipalities enacted tobacco sales controls at the rate of two ordinances a week.

Legal and legislative action against tobacco smoke pollution began in the 1970's, when employees began suing for smokefree workplaces and local and State governments began enacting smokefree air laws.

Legislation, Regulation

Congress enacted legislation making virtually all domestic airline flights smokefree, effective in 1990. That was the first Federal legislation to control ETS. Since then, comprehensive smokefree air legislation has been introduced several times in Congress, but the only legislation that has been passed is a law banning smoking in federally funded facilities that serve children. The Occupational Safety and Health Administration (OSHA) has proposed regulations to virtually eliminate smoking in public places and workplaces. This is the first time in OSHA's 25-year history that the agency is proposing a zero tolerance standard for exposure to a workplace hazard. Hearings on the proposed rules concluded early in 1995. But, at press time, the only Federal actions controlling ETS are the airline and the children's facilities laws.

Local and State governments have been far ahead of Congress, enacting ETS controls since the 1970's. Forty-eight States and the District of Columbia have legislation limiting smoking in workplaces and public places. Approximately 30 States have moderate to extensive controls. Five States (California, Maryland, Utah, Vermont, and Washington) have comprehensive legislation and/or regulations eliminating smoking in most workplaces and places of public accommodation. (Some allow exceptions for bars, hotel rooms, or separately enclosed, separately ventilated areas.)

Approximately 135 local ordinances mandate smokefree workplaces and public places, including restaurants. These ordinances are in place in Arizona, California, Massachusetts, North Carolina, Ohio, and Texas—in communities including Austin, Columbus, Sacramento, and San Francisco.

Approximately 40 local jurisdictions require smokefree workplaces and public places, excluding restaurants. Communities in Arizona, California, Colorado, Georgia, Maryland, Massachusetts, New Jersey, North Carolina, Ohio, Texas, and West Virginia—including the cities of Baltimore, New Braunfels, (Texas), San Diego, and Tempe (Arizona), plus seven North Carolina counties—have enacted this legislation.

Restaurants are required to be smokefree in approximately 60 communities and counties in 12 States where restaurant-specific ordinances have been passed. There are local ordinances in Alabama, Arizona, California, Colorado, Maryland, Massachusetts, New Mexico, New York, North Carolina, Texas, West Virginia and Wisconsin—in cities and counties including Aspen, Flagstaff, Lenox (Massachusetts), Los Angeles, and Madison (Wisconsin).

Approximately 75 cities and counties have passed legislation eliminating smoking in bars attached to restaurants. States where cities and counties have passed such legislation include Arizona, California, Colorado, Massachusetts, New York, and Texas. Communities that have passed legislation include Austin, Fort Bragg, Pasadena, San Jose, and Nassau County (New York), which includes the popular resort areas in the Hamptons. Thirty local jurisdictions prohibit smoking in free-standing bars. Legislation exists in communities in California, Colorado, Maryland, Massachusetts, Ohio, and Texas—including Boulder, a popular tourist city; Howard County (Maryland), a suburban area between Baltimore and Washington, DC.; and Amherst (Massachusetts), Emily Dickinson's hometown. California passed State legislation eliminating smoking in free-standing bars, effective January 1, 1998. (Americans for Nonsmokers Rights collects and analyzes ordinances and issues lists of 100 percent smokefree local legislation. ANR is in Berkeley, California, phone: 510 841-3032.)

Increasingly, even partial bans that are enacted are quite comprehensive. For example, early in 1995 New York City enacted legislation banning smoking in businesses, retail stores, indoors and outdoors at schools and children's institutions, and in the dining areas of all restaurants with more than 35 seats.

LITIGATION

Employees Sue for Smokefree Policies

With the 1993 EPA report on secondhand smoke establishing tobacco smoke as a Class A carcinogen—in the same category as asbestos, dioxin, and other cancer-causing agents—employees can now seek protection against tobacco smoke as an occupational health hazard. (In fact, many employers, large and small, responded to the EPA Report by eliminating smoking in their workplaces.

Under the Americans with Disabilities Act (ADA), employees can sue for protection against tobacco smoke because it limits access to the workplace for people with asthma and others legally classified as persons with disabilities who are sensitive to secondhand smoke. Since 1993, a number of plaintiffs have claimed that their medical conditions, exacerbated by ETS exposure, required a reasonable accommodation from their employers to protect them from ETS and allow them safe access to the workplace.

The ADA requires employers with 15 or more employees to make "reasonable accommodations" to the known physical limitations of an otherwise qualified individual with a disability. The Act defines disability as a physical impairment that substantially limits one or more major life activities. Major life activities include breathing and working, both of which can be substantially limited when individuals with severe respiratory or cardiovascular diseases are exposed to ETS.

In these cases, individuals can identify themselves as disabled under the ADA and request a reasonable accommodation from their employer. For people who simply cannot tolerate tobacco smoke for medical reasons, a reasonable accommodation would be to provide a work environment free from exposure to ETS.

If they are unable to negotiate a solution with an employer, employees with disabilities affected by ETS can file a discrimination complaint with the US Equal Employment Opportunity Commission (EEOC) or state human rights agency. To date, the EEOC has not taken action on this issue but rather has issued "right to sue" letters to the charging party. At that point, the claimant generally has 90 days to initiate litigation under the ADA. Damages may be available to compensate for actual monetary losses, for future monetary losses, for mental anguish, and inconvenience. Punitive damages also may be available if an employer acted with malice or reckless indifference.

Currently, about a half dozen ADA-ETS cases are pending in the courts. The plaintiffs in these cases suffer from asthma, heart disease, lung cancer, and other severe medical conditions which are caused or exacerbated by ETS exposure. (Smokers are not protected for nicotine addiction or as persons with disabilities under the ADA or anti-discrimination laws.)

Even before these two powerful new approaches were available, there have been a number of grounds employees can use to bring action against employers for failure to create a safe and healthful work environment. They include: common law duty of the employer to assure a safe workplace, assault and battery, intentional infliction of emotional distress, handicap discrimination, disability and retirement benefits, unemployment compensation, workers' compensation, labor union grievance procedures, and wrongful discharge. Here are some examples of cases where employees have won smokefree work environments or compensation:

- In the 1976 case, *Shimp vs. New Jersey Bell*, the first ETS case, a telephone company representative won a permanent injunction banning smoking in the office where she worked. The court said that "The evidence is clear and overwhelming. Cigarette smoke contaminates and pollutes the air, creating a health hazard not merely to the smoker but to all those around her who must rely upon the same air supply. The right of an individual to risk his or her own health does not include the right to jeopardize the health of those who must remain around him or her in order to perform properly the duties of their jobs."

- Andrea Portenier, a resident of Southern California, sued her employer for assault and battery because of secondhand smoke in her office. Portenier was repeatedly exposed to smoke at work, even though her employer, Republic Hogg Robinson Insurance Brokers, knew of her medical record of sensitivity to tobacco smoke. The case was settled on March 1, 1994 and Portenier received an undisclosed sum for both workers' compensation and assault and battery.

- Avtar Ubbi, a vegetarian nonsmoker with no history of heart disease in his family, sued his employer for an ETS-induced heart attack. His job as a waiter in a California bar and grill exposed him to tobacco smoke for 5 years. This case was a landmark because it was the first heart-disease related court decision in favor of an employee exposed to secondhand smoke. Ubbi was awarded \$85,000 for medical bills and \$10,000 in disability compensation. (*Ubhi v. State Compensation Insurance Fund, Cat 'n' Fiddle Restaurant*, 1990)

- A nurse who worked in a psychiatric unit at a Veterans' Administration hospital died of lung cancer. Finding that ETS exposure in the workplace caused the lung cancer, the Director of the U.S. Department of Labor Office of Workers' Compensation Programs awarded death benefits to her widower. The decision concluded that the weight of the medical evidence ". . . is sufficient to establish that the claimed fatal condition was causally related to the deceased claimant's work exposure to ETS while employed as a Staff Nurse and Head Nurse at the VAMC." (In

re. Wiley, 10.8 Tobacco Products Litigation Reporter 2.295, No. A9-365951, Ind. 1995)

- The U.S. Circuit Court of Appeals for the Ninth Circuit ruled that a government worker who was hypersensitive to smoke was “environmentally disabled” and thus eligible for disability benefits when working in a smoke-filled environment. Her employer was ordered to provide her with a smokefree work environment or to pay her disability benefits. (*Parodi v. Merit Systems Protection Board*, 1982) The Tobacco Control Resource Center, Boston, reports that the plaintiff, in 1984, received an out-of-court settlement that provided full disability retirement pay of \$500 per month and a \$50,000 lump sum payment.

- In *White v. United States Postal Service* (1987), the EEOC ruled that a letter carrier with a respiratory problem, who had filed a discrimination complaint, was not reasonably accommodated when the Florida post office where he worked offered him a facial mask and a new location for his desk. The EEOC ordered the post office to eliminate smoking and “to ensure that appellant and similarly situated employees with physical handicaps related to sensitivity to tobacco smoke are not subject to discrimination in the future.”

- In September 1982, a Federal District Court in Seattle ruled that sensitivity to tobacco smoke is a legal handicap under the terms of the Federal Rehabilitation Act of 1973. The case was brought by Lanny Vickers, a 44-year-old purchasing agent with the Veterans Administration Hospital, who suffered from respiratory problems; his employer now provides a smokefree work area. The Act applies to the Federal Government and recipients of Federal funds. It requires “reasonable accommodation” for workers with disabilities. Companies found to be in violation of the Act risk the loss of all their government contracts.

- In 1982, the California Court of Appeals ruled that Paul Hentzel, who was fired for demanding a smokefree work area, could sue his former employer, the Singer Company, for “intentional infliction of emotional distress” and wrongful discharge. The Court ruled that an employee is protected against discharge for complaining in good faith about unsafe working conditions.

Employers Defend Smokefree Policies

Some employers are hesitant to establish smokefree policies because they fear lawsuits from employees who smoke. Few employees and/or unions have brought such suits. While court results have been mixed to date, the trend is to favor employers’ right to act, after proper consultation with unions. In the case *Riddle v. Ampex Corp* (1992, the Colorado Court of Appeals, upholding an employer’s policy, noted that “. . . smoking restrictions are a common fact in today’s life, not only in the workplace but in social and commercial environments as well.” Please see the Unions section for more cases.)

The tobacco industry, which tries to divert attention from the health problems of smoking, has posited a “right” to smoke, using its considerable financial and political might, the tobacco industry has lobbied for legislation backing “smokers’ rights.” From 1989 to 1995, 29 States and the District of Columbia passed legislation protecting smokers in some or all hiring and firing decisions. (Please see The Tobacco Industry section for more information. But these laws do not prevent employers from establishing smokefree policies.

Other ETS Litigation

Individuals have brought suit against public places, including restaurants, seeking smokefree air under provisions of the Americans with Disabilities Act, which guarantees access to workplaces and public places for people with disabilities. (Please see “Employees Sue . . .” above.) Tenants and condo owners have sought protection from ETS citing nuisance, breach of duty to keep premises habitable, breach of common law covenant of peaceful enjoyment, negligence, battery, and emotional distress. (Please see the Landlords section for more information.) Parents and child welfare agencies have obtained decisions banning smoking by parents and others around children. Prisoners have brought suits seeking freedom from ETS (and freedom to smoke).

Decisions have gone both ways in these cases but establishing a smokefree policy is emerging as the course of least legal liability. Failing to protect people from ETS becomes more legally hazardous with every new scientific study documenting the health hazards of ETS. The combination of the EPA report on ETS and the ADA seems particularly likely to enhance the chances of success for nonsmoking plaintiffs. Following are several cases:

- The U.S. Court of Appeals for the Second Circuit ruled on April 4, 1995 that three asthmatic children could sue McDonald’s and Burger King, and declared that a ban on smoking could be a “reasonable modification.”

- A nonsmoker who was a guest on a live radio show had cigar smoke blown in his face. He alleges that the act was done deliberately to cause him "physical discomfort, humiliation or distress," violated his right to privacy, constituted battery, and violated a Cincinnati Board of Health regulation. A trial court dismissed all his claims, but on January 26, 1994, the Court of Appeals, First Appellate District of Ohio, reinstated the battery claim and ruled that when one of the defendants intentionally blew cigar smoke in the plaintiff's face, under Ohio common law, he committed a battery. (*Leichtman v. WLW Jacor Communications*)

- In prisons, the question has arisen whether involuntarily exposing a prisoner to ETS might constitute cruel and unusual punishment in violation of the Eighth Amendment. In *Helling v. McKinney*, a convicted murderer housed in a cell with a heavy smoker brought a civil rights action against prison officials. On June 18, 1993, in a 7-2 decision, in an opinion written by Justice White, the U.S. Supreme Court held that ". . . we cannot rule at this juncture that it will be impossible for McKinney [the prisoner] . . . to prove an Eighth Amendment violation based on exposure to ETS." The court also rejected prison officials' central thesis that only deliberate indifference to current serious health problems of inmates is actionable under the Eighth Amendment.

A Summary of Legal Cases Regarding Smoking in the Workplace and Other Places is available from the Tobacco Control Resource Center, Northeastern University School of Law, Boston, phone: 617 373-2026. Regularly updated, it lists and describes approximately 200 cases. Taking Action to Protect Yourself from Tobacco Smoke in the Workplace describes a number of cases and gives information on how employees can file claims. That publication, written for non-attorneys, is available from Action on Smoking and Health, Washington, DC, phone: 202 659-4310.

UNIONS

"[Banning workplace may be counterproductive because] noticeable levels of . . . tobacco smoke are a visible indicator that ventilation is inadequate. . ."—Union official, from *Where There's Smoke*, published by the Bureau of National Affairs, 1987

"Many unions have already adopted positions supporting worksite tobacco control policies; 77 percent of national unions and 43 percent of local unions either banned or restricted smoking in union offices."—First nationwide survey of unions on worksite smoking policies, Dana-Farber Cancer Institute, 1995

Smokefree Air or Free To Smoke

Unions, like other sectors of society, increasingly support smokefree policies. Decision makers creating smokefree policies need to be cognizant of unions because a significant percentage of employees (approximately 16 percent of all wage and salary workers in the United States) are union members and about half of private-sector, non-agricultural jobs are in worksites where a majority of either the production employees or the non-production employees are unionized. The National Education Association (NEA), for instance, represents more than 2.2 million school employees in 70 percent of the nation's school districts. (From *New Solutions, A Journal of Environmental and Occupational Health Policy*, Summer 1996, published by the Oil, Chemical and Atomic Workers International Union, AFL-CIO. That volume contained the proceedings of the conference, "Smokefree or Free to Smoke? Labor's Role in Tobacco Control," Washington, DC, September 1995. it is an excellent resource.)

Unions are not uniform in their response to smokefree policies. The Bakery, Confectionery and Tobacco Workers Union has opposed smokefree policies, believing that more smokefree policies mean fewer jobs for its members, and has asked other unions to join it in solidarity on this issue. Yet other unions support smokefree policies, both to support the health of their members and to further the professional goals of their members.

Musicians in California fought legislation which postponed until 1998 the original 1997 implementation date for State legislation banning smoking in bars. This was an issue of workplace health for singers and musicians who play in bars and clubs. Flight attendants were one of the first groups of employees to work for nonsmoking policies in their workplaces. Unions that advocate smokefree policies to protect the health of their members, also ask other unions to join them in solidarity.

"Some unions that have taken a proactive position on smoking include: Fire Fighters (the issue of presumptive laws on cancer and heart disease); nurses (encourage programs of positive health education); and teachers (responsibility to educate young people). Some of these unions have supported far-reaching positions such as not investing in tobacco company stocks, eliminating Federal tobacco subsidies, increasing cigarette taxes, encouraging legislative initiatives, and opposing coercion of other nations to accept U.S.-produced tobacco." (*New Solutions*) The NEA supports smokefree policies in its members' workplaces and in public places, in addition to

many anti-tobacco measures, including controls on tobacco advertising. In California, all labor unions, including building trades unions, supported State legislation to ban smoking in all workplaces.

The first nationwide, systematic study of unions on this question, surveying almost 200 unions, national, international, and local, was conducted in 1995 by the Dana-Farber Cancer Institute. It determined that 17 percent of national unions supported a complete ban on smoking in the workplace; 26 percent supported restrictions; only 3 percent actively opposed nonsmoking policies. Among local unions, 15 percent supported a complete ban; 33 percent supported restrictions; and 8 percent actively opposed nonsmoking policies. Most national unions had eliminated or restricted smoking in their offices; 52 percent were smokefree and 25 percent allowed smoking only in designated areas. Among local unions, 31 percent were entirely smokefree and 12 percent had limited smoking to designated areas (*New Solutions*).

Just as unions differ in their response to questions about tobacco use, individual union members differ in their tobacco use. This poses a dilemma for some unions. "This is a very touchy area," one official said. "I file grievances for nonsmokers. I file grievances for smokers. Arguing both sides undermines the arguments."

A primary role of unions is to protect the health and safety of union members. In 1991, the National Institute for Occupational Safety and Health, responding to increasing evidence that ETS is a health hazard, recommended that workers be protected. Unions have a responsibility.

Some union leaders fear that smoking issues might obscure other problems in the workplace, that management might use a smoking ban as an excuse not to clean up other health hazards in the workplace. "Just eliminating smoke is not going to take care of indoor air quality," one union official commented. Some union leaders also worry that employers will maintain that employee health problems result from smoking rather than workplace exposures.

This ambiguity has led some unions to adopt a position of "no position" on smokefree policies. But that surrenders union's role on the issue. With employers conscious of health care dollars spent because of tobacco, unions can be at a disadvantage. As one of the participants of the Washington, DC. labor conference put it, ". . . when we have to put an extra 50 cents into your health and welfare contribution (to pay for smoking-related illnesses), it truly does come out of the wage negotiation."

Legal Issues

The National Labor Relations Board (NLRB) has ruled that regulation of smoking by management is a "term or condition of employment" and a subject for collective bargaining (304 NLRB 957, 1991, quoted in *New Solutions*). *New Solutions* cites an evaluation of 92 published decisions in which management prevailed in upholding proposed policies on smoking twice as frequently as unions succeeded in blocking them. Relatively few unions have taken employers to court over this question, compared to the thousands of employers who have implemented smokefree workplaces. Following are cases where employers have been challenged by unions for instituting smokefree policies and one case in which a union and an employer were challenged by an employee for not instituting a smokefree policy:

- An arbitrator had to decide whether a company's establishment of a new smokefree policy violated the Collective Bargaining Agreement between the company and a union in Koch Refining Co. and Oil, Chemical and Atomic Workers International Union, Local 6-662. The union argued that a 1987 policy restricting smoking was fair. The company said that it had notified the employees in 1988 that it was eventually going to ban all smoking anywhere on its premises. The arbitrator decided that ". . . the Company's rule is suited to Company purposes and it cannot be considered capricious or arbitrary." Therefore, the union's grievance on behalf of its smoking members was denied.

- In the case of *W-I Forest Products Co.* (304 NLRB 957, 1991), an administrative law judge (ALJ) initially ruled that smoking bans are not a mandatory subject of collective bargaining. A three-member panel of the NLRB ruled that not every management practice that affects employees is necessarily a mandatory subject of bargaining, because some management practices are strictly matters of "entrepreneurial concern" and an employer has no duty to bargain. However, the panel ruled that the ALJ had erroneously assumed that "protecting employee health and carrying out recommendations of various reports by the Surgeon General are core entrepreneurial purposes of a lumber mill," and that, while "[t]hese may be laudable objectives for any employer . . . they do not go to the heart of Respondent's business. . . ." Thus, a rule that forbids smoking is "germane to the work environment," and, therefore, a mandatory subject of bargaining.

- In a 1993 case in New Jersey, a union grieved a unilateral implementation of a smoking ban as violating the employer's obligation to negotiate over terms and conditions of employment. The employer in the case (*In re. Association for Retarded Citizens, Monmouth Unit, Inc. and Federation of N.J.A.R.C. Staff, Local 3782, NJSFT, AFT, AFL-CIO, 8.2 Tobacco Products Litigation Reporter 8.4, 1993*), had opened a new building which, according to a memorandum circulated by the employer, would be smokefree. The employer asserted that smoking is not a term and condition of employment under applicable law and therefore did not require negotiation with the union. There had been no prior negotiation with the Federation regarding smoking; the matter was brought to arbitration. The arbitrator ruled that the Federation did not have a right to negotiate over whether or not smoking should be banned in the new building. Therefore, the grievance was denied.

- An example of how societal trends can move the law is seen in the case of *In re. Akron Brass Co. and International Association of Machinists & Aerospace Workers Lodge 1581, 93 LA 1070 (1989)*. A unilaterally promulgated no-smoking policy, to be implemented in three stages, was ruled unenforceable as to the third stage (a total ban on smoking). The arbitrator ruled that management did have an exclusive right to establish reasonable shop rules but also ruled that such a rule was not reasonable because of the rarity of instances in which such a total smoking ban had been instituted. Four years later, however, the same arbitrator ruled (at 101 LA 289, 1993) that the company could impose a total smoking ban. By implementing such a ban, "Akron Brass is conforming to an industrial pattern that is now widespread—indeed, is increasing—and, as well, is now widely approved by arbitrators."

- Unions that don't protect members from ETS may expose themselves to legal liability. *United Auto Workers Local 594* was sued by a member who wanted protection from ETS. In January 1996, Robert McCance, a wood modeler in the General Motors Truck Group engineer unit in Pontiac, Michigan, filed a lawsuit against his union as well as his employer, saying neither took his grievances seriously (*Flint Journal*, January 15, 1996).

The Benefits

The primary benefit of a smokefree environment for unions is that it protects union members from ETS. A smokefree policy also encourages members who smoke to reduce their smoking or become nonsmokers, thereby improving their health and reducing the exposure of their families to secondhand smoke. These result in lower health care costs for everyone. Another plus for unions: Studies have found that when tobacco control policies are well defined and consistently enforced, they minimize polarization between smoking and nonsmoking members.

Working Together

The trend toward providing smokefree environments is advancing, in workplaces with union members and in the workplaces of unions:

- When the city of Seattle went smokefree in the 1980's, city managers had to deal with dozens of unions. Agreements were reached with all and the smokefree policy was enacted.

- In the mid-1980's, the Communications Workers of America's northwestern region area director, Sue Pischa, was faced with requests from nonsmoking members for smokefree air at work. Responding to her members' needs, she became a pioneer in tobacco-control policy development among union leaders.

- In 1989, the Ford Motor Company began initiating smoking restrictions in all of its United States facilities. A Ford spokesman said the rules had been suggested to top management by a committee of employees that had studied the issue for a year.

- In the early 1990's, in Contra Costa County, California, the Central Labor Council surveyed its 85 affiliated unions on the issue of a county ordinance prohibiting tobacco smoke in public places. Seventy percent of the affiliates favored such an ordinance. In fact, they all had smokefree policies in place at their affiliate offices already. In addition, the parent organization of all the labor unions in the State and the parent organization of all the building trades in the state fully supported tobacco controls.

- Communications Workers of America Local 1037, which represents 6,000 State employees in 450 work sites in New Jersey, has vigorously worked to help its members get smokefree work environments, has offered smoking cessation programs to its members, and has a smokefree environment in its offices in Newark.

- General Motors' Service Parts Operations in Lansing, Michigan decided on a smokefree policy in 1994, when 640 members of UAW Local 1753 voted two to one for the new rule, which was initiated by the workers.

- The United Auto Workers have adopted a policy on smoking for their headquarters, Solidarity House in Detroit, and other offices where 1,000 employees work. The policy, which has been in place for several years, allows smoking only in separately enclosed, separately ventilated areas, according to Frank Mirer, director of health and safety.

ECONOMICS

"I smoked away a Porsche."—New nonsmoker, calculating his costs for 40 years of smoking

Smoking and environmental tobacco smoke hurt the bottom line for employers and proprietors of public places. They increase:

- health and dental care costs
- absenteeism, tardiness, lost productivity
- disability retirements, survivors' benefits
- property damage, fires, accidents
- maintenance costs
- air cooling, heating, and ventilation costs
- health, life, property, and fire insurance costs
- morale problems, disputes over ETS, offended customers, lost business
- litigation costs.

Health Care and Lost Productivity

In 1985, at the request of the Subcommittee on Health of the House Ways and Means Committee, the U.S. Office of Technology Assessment developed estimates of smoking-related health care costs borne by government through Medicare and Medicaid programs. That was one of the first attempts by Congress to put a price tag on tobacco problems. Calculating only for the three major categories of smoking-related diseases—cancer, cardiovascular disease, and respiratory system disease—the OTA estimated \$12 to \$35 billion costs in health care because of tobacco use and \$27 to \$61 billion costs in lost productivity every year.

Over the last decade more attempts have been made to quantify the costs of smoking, especially as health care costs rise. A current best estimate is \$50 billion annually for health care costs and another \$50 billion for lost productivity.

Numbers of that magnitude are numbing. One antismoking advocate offers a more comprehensible calculation: The average pack of cigarettes at \$2.50 produces costs of \$5.00. But he acknowledges that his calculations do not include the "savings" that result from smokers' shortened life spans.

Here are some more specific studies, conducted by various organizations, looking at different populations and different areas of costs:

- The Coalition on Smoking or Health (consisting of the American Cancer Society, American Heart Association, and the American Lung Association) reported that "Even though smokers die younger than the average American, over the course of their lives current and former smokers generate an estimated \$501 billion in excess health care costs." ("Saving Lives and Raising Revenue," February 1995)

- In 1991, the Massachusetts Department of Public Health published *Smoking: Death, Disease, and Dollars*, estimating more than \$1.5 billion of costs in Massachusetts each year for medical care, premature death, and lost income due to illness as a result of tobacco use.

- In 1992, the California Department of Health Services published a 200-page document detailing the "multibillion dollar burden on Californians" from tobacco use. That study calculated \$7.6 billion in 1989 for direct medical costs and lost productivity due to illness and premature death due to smoking. By the mid-1990's, that price tag was upped to \$10 billion.

- Union Camp Corporation evaluated the health costs of 700 employees and discovered that those who certified that no covered family members used tobacco products cost the company \$462 less in health care costs in 1992 than those who smoked. Among 400 production employees for whom there was absenteeism data, nonsmokers cost the company \$284 less sick pay.

- In a study of 2,500 postal employees, the absentee rate for smokers was 33 percent higher than for nonsmokers. (*American Journal of Public Health* 82:29, 1991)

- Smokers are absent from work 50 percent more than nonsmokers; they are 50 percent more likely to be hospitalized; they have 15 percent higher disability rates; their absenteeism rate from work is 50 percent higher. (*New England Journal of Medicine*, April 7, 1994, and *Southern Medical Journal*, January 1990)

- Wanda Hodges, director of operations for the Dollar Inn in Albuquerque, found her smoking employees were late to work 50 percent more frequently than non-smoking employees.

- Chief Charles Rule of the Alexandria, Virginia Fire Department, more than a decade ago, calculated that a disability retirement cost the city \$300,000 more than a routine retirement. No nonsmokers had ever been placed on heart and lung disability in their department, according to the Chief.
- Employees who take four 10-minute work breaks a day to smoke actually work 1 month less per year than workers who don't take smoking breaks. (Action on Smoking and Health, March 1994)
- A study conducted by the Midland Division of Dow Chemical, with 5,693 employees, demonstrated that the company spent \$657,000 annually in excess wage costs alone because of smoking by employees.

The range of these estimates and experiences indicates that economic calculations about smoking's impact are complicated. One complication: Until recently, most nonsmokers in the United States were exposed to ETS. That compromises their value as control subjects. (And it increases their health care costs. In general, the more extensive the exposure of nonsmokers to ETS, the more their health care costs increase.)

Maintenance

Smoking and ETS increase property damage, fires, accidents, and air heating, cooling, and ventilation costs, as well as maintenance expenses.

Smoking is almost universally banned near computers, precision instruments, and other delicate equipment because owners want to protect their investment in that equipment. The experiences of computer repair technicians and telephone repairers validate that prudence; they report a lower incidence of service calls at smokefree facilities. The first lawsuit in which a nonsmoking employee won an injunction banning smoking in her workplace turned on the fact that the employer, New Jersey Bell, protected its electronic switches from smoke but did not show as much concern for its "human equipment." (*Shimp vs. NJ Bell*, 1976)

Fires and accidents have an economic toll as well as a human toll. The National Fire Protection Association reports \$391 million direct property damage for smoking-related fires in 1993. (Please see the Safety section for more information on fires and accidents.)

Air cooling, heating, and ventilation costs can be reduced by smokefree policies. ASHRAE standards (set by the American Society of Heating, Refrigeration, and Air Conditioning Engineers) specify ventilation rates required in workplaces and public places, with different rates for offices, food preparation areas, rest rooms, industrial shops, operating rooms, etc. Like a menu in a Chinese restaurant, ASHRAE standards now have two columns, one listing rates for smokefree areas, the second showing increased fresh air exchanges needed for smoking areas.

Smoking and ETS create maintenance headaches and costs, increasing litter, odors, cleaning requirements, and the need to paint more frequently, as well as necessitating the purchase of ashtrays, cigarette receptacles, even smoking "lounges." The *Financial Times* (London) quoting the Organisation for Economic Cooperation and Development, wrote that construction and maintenance costs are 7 percent higher in buildings that allow smoking than in buildings that are smokefree, and creating a separately enclosed, separately ventilated smoking area can cost \$100,000 or more (March 29, 1996).

In flight, smoking increases maintenance costs. Paul Turk, speaking for U.S. Air said, "A substantial amount of smoke in the cabin will, over time, mean you've got to spend more time cleaning the interior, and your ventilation system gets kind of gummed up." Air Canada, which has been smokefree since 1993, says it saves hundreds of thousands of dollars on its cleaning bills. Both experiences were cited in the *New York Times* (June 30, 1996).

Other companies have reduced tobacco-caused maintenance problems:

- When Merle Norman Cosmetic Company in Los Angeles eliminated smoking, it saved \$13,500 the first year because of reduced housekeeping costs. (It also reported lower absenteeism and increased productivity.)
- After Unigard Insurance in Seattle went smokefree, its maintenance contractor voluntarily reduced his fee by \$500 per month. Vice President Robert Barnitt said the contractor told him cleaning staff no longer had to dump and clean ashtrays or dust desks and clean carpets as frequently.
- At the Dollar Inn, Albuquerque, maintenance costs are 50 percent lower in non-smoking rooms.
- In a survey of cleaning and maintenance costs among 2,000 companies that adopted smokefree policies, 60 percent reported reductions (*Personnel*, August 1990).

Insurance

The impact of tobacco use on health, life, fire, and property is accurately reflected in the response of insurance underwriters. Dozens of companies offer discounts on life, disability, and medical insurance for nonsmokers. Among them are Aetna, Metropolitan, Mutual of Omaha, Prudential, and Phoenix. Three tobacco conglomerates own insurance companies that offer discounts. American Brands owns Franklin Life; Loews owns CNA; and British American Tobacco owns Farmers. CNA recently offered \$500,000 of life insurance to 30 year olds for \$425 if they were smokefree or \$935 if they smoked. Landlords and restaurants with smokefree premises have negotiated lower fire and property insurance premiums.

Contentions

Disputes over smoking are unsettling for customers and proprietors, producing a psychic cost. Tim King, a partner and manager of Le Colonial, a popular Vietnamese restaurant in Beverly Hills, equates the lighting of a cigarette with the drawing of a gun (*New York Times*, June 30, 1996). "If someone gets poised to smoke, you can immediately feel the tension building around the room. People sit around waiting for something to happen. They know there's going to be a confrontation. Then once they light up, it takes about 2 seconds for at least 10 people to jump up and complain."

Like this proprietor, employers who find themselves mediating disputes among employees about smoking versus breathing smokefree air, schools that try to assign dormitory space based on smoking and nonsmoking preference, and restaurants with empty tables in the smoking section while customers wait to be seated in nonsmoking, all know the meter is running. There is an economic cost from these problems as well as a human cost.

Worst scenario, employers and proprietors may find themselves in court for not protecting employees and members of the public from ETS. These costs can be avoided with a smokefree policy. (Please see the Legislation, Regulation, and Litigation section and the Especially For section for more information.)

Worldwide Costs

Around the globe, society foots an enormous bill for tobacco. In a world where many go hungry, land is being used to grow tobacco instead of food crops. Ten to 20 million people could be fed with the land used for tobacco crops, according to Dr. Judith MacKay, Executive Director of the Asian Consultancy on Tobacco Control, Hong Kong. Money that families need for food, shelter, or health care is spent on tobacco.

" . . . to grow tobacco is to destroy the trees—and land. Tobacco curing requires an enormous amount of wood. The unheralded scandal of the tobacco industry is the damage to land in developing nations. *The United States Global Report 2000* . . . identifies deforestation as the most serious environmental problem now facing the Third World . . . one out of every eight trees cut down is used for curing tobacco." ("The Environmental Impact of Tobacco Production in Developing Countries," *New York State Journal of Medicine*, December 1983)

Profits for tobacco farmers? In less developed countries, tobacco farmers make a profit of 2 percent while the multinational tobacco companies realize 79 percent return, according to Dr. MacKay.

Even in the United States, the economic benefits of tobacco accrue primarily to the tobacco companies. American tobacco farmers and manufacturing employees are making less as tobacco companies make more. The companies are automating production (which eliminated 28 percent of manufacturing jobs between 1982 and 1992), buying more tobacco abroad, and building factories in countries with cheaper labor.

American tobacco companies say they provide 800,000 jobs in the United States, a figure disputed by experts outside the industry. Even accepting industry figures, balancing those jobs against more than 400,000 people a year who die from tobacco-related deaths, means that one person must die each year to sustain two jobs. Thus, a 44-year career for one employee of Philip Morris or R.J. Reynolds must be supported by the deaths of 22 of his or her fellow Americans.

This awful calculation also assumes that money not spent on tobacco would be lost to the economy; actually it could be spent on other products and services, creating new jobs. A study, "The Economic Implications of Tobacco Product Sales in a Nontobacco State" (*JAMA*, March 9, 1994), concluded that "Reducing or eliminating tobacco product spending in Michigan will increase employment in the State, as well as health."

The World Bank has recognized the health and economic disaster of tobacco and, in 1992, created a formal policy to discourage the use and production of tobacco. The

World Bank now refuses to invest in tobacco production, processing or marketing. Speaking about the economic burden of the global trade in tobacco, at the 9th World Conference on Tobacco and Health in Paris, October 1994, Howard Barnum, senior economist at the World Bank, declared, "The world tobacco market produces an annual global loss of U.S. \$200 billion." At that conference, Oxford University Press issued *Mortality from Smoking In Developed Countries 1950-2000* by Peto and others, predicting increased tobacco-related deaths. In response, Barnum wrote that those increased deaths ". . . would approximately double the estimated net economic costs of tobacco." (*Tobacco Control*, 1994; 3:358-361)

Dollar Returns of Smokefree Policies

Thousands of employers and proprietors of public places throughout the United States have instituted smokefree policies. Many have become smokefree in compliance with legislation, regulation, or litigation. They experience minimal costs; usually, savings result. (Please see the Especially For section and Smokefree Workplaces and Public Places lists for the names and experiences of many.) The city of San Luis Obispo passed a 100 percent smokefree restaurant and bar ordinance in 1990. The ordinance had no measurable impact on the profitability of San Luis Obispo bars and restaurants, or on sales tax revenues. That experience is typical. (Please see the Legislation, Regulation, and Litigation section and the Especially For section for more information.)

The U.S. Environmental Protection Agency has analyzed the costs and benefits of smoking restrictions, estimating the effects of proposed Federal legislation to eliminate smoking in most workplaces and public places. In its April 1994 report, the EPA concluded that benefits would exceed estimated costs by \$39 to \$72 billion.

One cost of smoking controls would be expenses involved with increased longevity, for instance, more pension payments. Dr. Marvin Kristein, professor of economics at the City College of New York, and probably the first economist to analyze smoking issues, wrote, ". . . defending smoking as a way of protecting pension systems is more socially inefficient and crueler than simply poisoning a selective group of the population over 65 chosen by lottery." (*New York State Journal of Medicine*, January 1989)

As Dr. Kristein's observation illustrates, cost is not really the bottom line in human decisions. Most organizations provide safe and healthful environments because they value their employees and their customers. One such caring decisionmaker is Andrew Smith, who was president of Pacific Northwest Bell, the employer of 15,000 people and the phone company for Washington, Oregon, and Idaho, when it went smokefree October 15, 1985. (It is now part of US WEST.) About their decision, Smith stated, the ". . . bottom line is our employees. Pacific Northwest Bell cares about the people who work here."

SMOKING PREVALENCE

Tobacco company executive, when asked if he smoked: "Are you kidding? We reserve that right for the young, the poor, the black, and the stupid."—Reported by David Goerlitz, former Winston cigarette model

Most people don't smoke. More than three out of four American adults are non-smokers. Studies and reports by the U.S. Centers for Disease Control, the National Cancer Institute, and the American Cancer Society in the mid-1990s showed adult smoking prevalence below 25 percent, with men's rates slightly higher and women's prevalence slightly lower.

Major predictors of smoking among adults are less education and lower income. Among people with fewer than 12 years of education, smoking rates are 32 percent; within that group, men are more likely than women to smoke and, in some communities, especially in the South, male smoking rates may exceed 40 percent. African-American men have smoking rates of approximately 31 percent. Smoking is increasing among Hispanics, traditionally a low-smoking population. Smoking prevalence among Hispanic men now averages about 25 percent, with wide variation by country of origin and degree of acculturation.

Smoking is increasing among women, after declining from the late 1970's to the late 1980's. "This is particularly disturbing because more women today die of lung cancer than die of breast cancer, and lung cancer is totally preventable," says Dr. Michael Eriksen, director of the U.S. Centers for Disease Control, Office on Smoking and Health.

Almost all smoking begins in childhood. More than 90 percent of smokers start before they reach 21; almost half of firsttime smokers are children not yet in their teens. More than 3,000 young people join the ranks of regular smokers each day, according to the American Cancer Society. Latest information shows tobacco use rising by minors, up 7 percent between 1991 and 1996.

Other information from the Centers for Disease Control showed that smoking is most prevalent among people 25 to 44 years old, native Americans, and those who live below the poverty line. Therefore, places where people from these groups are concentrated may expect higher than average smoking prevalence.

Prevalence also varies by region. The States with the lowest percentages of smoking are Utah (13.2), California (15.5), Hawaii (17.8), New Jersey (19.2) and Idaho (19.8). The States with the highest prevalence of smoking are Kentucky (27.8), Indiana (27.2), Tennessee (26.5), Nevada (26.3) and Ohio (26.0).

Most Smokers Want To Be Nonsmokers

As many as nine out of ten current smokers say they want to quit, according to numerous studies conducted through the years by health organizations such as the American Lung Association, government agencies, polling firms, and others. The 1994 National Health Interview Survey found that more than 69 percent of current smokers wanted to quit smoking.

Smokers are worried about the consequences of their smoking. In a 1989 national survey conducted by The Wirthlin Group, a national public opinion research firm, 83 percent of smokers reported they believed they were at risk for emphysema and chronic bronchitis and two-thirds of them considered themselves addicted to smoking.

One potent demonstration of smokers' desire to quit smoking: Every year, one out of three smokers makes a serious attempt to quit, according to the American Cancer Society.

Favorable opinions about smokefree policies in workplaces and public places are almost as high among smokers as nonsmokers. One reason people who smoke are receptive to tobacco control is because smokefree environments support their desire to gain control over their addiction.

While the late 1980's saw lung cancer surpass breast cancer as the leading type of cancer death for women, the early 1990's saw a heartening change: By 1992, half of all Americans who had ever smoked had quit smoking. More than 40 million Americans have quit smoking. In the words of Edwin B. Fisher, Jr., Ph.D., associate professor of psychology at Washington University in St. Louis, "That's one of the most dramatic examples of voluntary human behavior change in history."

PUBLIC OPINION

"Public opinion on restricting smoking really couldn't get much clearer. This survey [by the National Cancer Institute] indicates that the vast, vast majority of Americans favors restricting smoking in public places and that public policy is lagging behind public opinion."—Russell Sciandra, Associate Director, Smoking Control Program, Roswell Park Cancer Institute

Both nonsmokers and smokers overwhelmingly support tobacco controls in workplaces and public places. This support has grown over the years. The polls, studies, and referenda described below were conducted by a variety of organizations among a variety of populations, using different methods—telephone polling, interviews, etc. Results vary and there is a strong consistency of support.

National Polls

A 1991 survey of ten cities by the U.S. Centers for Disease Control found that 98 to 100 percent of those interviewed supported restricting or banning smoking in hospitals and doctors' offices; 93 to 99 percent supported restrictions or bans in government buildings, indoor sports arenas, and restaurants; 90 to 95 percent advocated restrictions or bans for private worksites. Support for controls in bars and bowling alleys ranged from 62 to 88 percent.

In 1992, the Sierra Health Foundation found a clear majority of voters favored total elimination of smoking in public places. Ninety percent or more supported smokefree child care and health care facilities. Eighty to 88 percent was the range of support for smokefree public transportation, movie theaters, workplaces, offices, indoor sporting events, public buildings, and retail shops. Seventy to 76 percent wanted total bans in taxi cabs and restaurants. Even bowling alleys and bingo parlors garnered support of 65 percent.

The U.S. Current Population Survey, which queried 222,409 adults, reported the following results in 1994:

- 57 percent of all adults favored a ban on smoking in work areas; 39 percent favored restrictions
- 54 percent of all adults favored a ban on smoking in shopping areas; 40 percent favored restrictions
- 66 percent of all adults favored a ban on smoking at indoor sports events; 28 percent favored restrictions

- 45 percent of all adults favored a ban on smoking in restaurants; 51 percent favored restrictions.

Local Polls

The 1993 Massachusetts Tobacco Survey was a telephone survey of a representative sample of adults and youth (aged 12 to 17) in 11,500 households across the State. It found that:

- 47 percent supported a ban on smoking in restaurants; 51 percent supported restrictions
- 46 percent supported a ban on smoking in public buildings; 52 percent supported restrictions
- 58 percent supported a ban on smoking at indoor sporting events; 38 percent favored restrictions
- 19 percent supported a ban on smoking at outdoor sporting events; 52 percent supported restrictions.

A statewide poll in New Jersey, conducted by the Eagleton Institute for the University of Medicine and Dentistry of New Jersey in 1995, found that smoking bans were favored by:

- 98 percent for public schools
- 80 percent for indoor sporting events
- 70 percent for workplaces
- 64 percent for shopping malls
- 62 percent for restaurants.

Older Polls

These studies from the 1990's, including the massive U.S. Current Population Survey, are consistent with the findings of hundreds of other recent studies. But even 20 years ago, public opinion supported tobacco controls. As early as 1975, 70 percent of Americans wanted smoking limited in public places including restaurants, according to the U.S. Government survey, "Adult use of Tobacco." In 1977, 84 percent of those surveyed supported separate sections or a ban on smoking in public, according to a Gallup poll.

Those Who Smoke

People who smoke also support smokefree policies, according to local and national opinion polls through the last two decades, including some by the tobacco industry. Not surprisingly, smokers' support for smokefree policies is lower than nonsmokers' support, but usually falls only a few percentage points lower and almost always includes a majority of smokers. One poll asked a question about tobacco restrictions to which smokers gave higher affirmative response: It asked, "Should the sale of cigarettes be banned?" Apparently, some smokers would like to be protected from temptation.

All Sectors of Society

Almost all sectors of society desire smokefree policies. Business travelers are a well-educated, higher-income segment of society. As expected from these demographics, they support smokefree policies. A 1995 survey by the International Air Transport Association, of more than 1,000 frequent business travelers, found 68 percent of travelers worldwide favored a complete ban on smoking on all flights and 78 percent of North Americans surveyed favored a full ban. The State Building and Construction Trades Council in California, the parent organization of all the building trades in the State, supported a bill to ban smoking in all workplaces in the State—a position that contradicts stereotypes about construction workers. The parent organization of all labor unions in the State also supported the legislation. A major national survey released by the Robert Wood Johnson Foundation in early 1995 showed broad support for tobacco controls to help protect children from becoming smokers. The support cut across age, gender, ethnicity, ideology, political party, geographic region, and smoking status.

Public opinion is shifting the tobacco policies of many establishments. When Clancy's Place restaurant in Princeton, New Jersey polled its customers about smoking policies, 86 percent favored a smokefree restaurant. In response, Clancy's became smokefree. Hotels, too, are experiencing increasing preference for smokefree environments. Business travelers are choosing nonsmoking rooms more often than they were 5 years ago, according to a study by Cahners Magazine Network. Half of more than 2,000 executives surveyed in 1992 said they request nonsmoking rooms, up from 40 percent in 1987. Embassy Suites, with 110 all-suite hotels in the United States and Canada, increased its smokefree suites from 51 to 75 percent of each hotel in 1995, after repeated requests from its guests. (Please see the Public Places and Restaurants sections for more information.)

Tobacco Country

Even in the heart of tobacco country, smoking restrictions and bans garner support. The overwhelming majority of adults polled in Kentucky, the nation's largest burley tobacco-producing State, said they favor banning or limiting smoking in public places. The poll, conducted by the *Louisville Courier-Journal* and released in 1987, found that 72 percent of those questioned wanted smoking restrictions in offices, restaurants, and airplanes. In metropolitan Richmond, Virginia, where Philip Morris is the largest private employer, a *Richmond Times-Dispatch* poll (July 1996) found that 75 percent of those polled approved of smoking restrictions in public places.

In Greensboro, North Carolina, home of one of the world's largest cigarette-manufacturing plants, a city ordinance to ban smoking in large retail stores and require nonsmoking sections in restaurants was on the ballot in 1989. It passed, though only by 173 votes out of more than 29,000 cast. The Tobacco Workers International Union, in an effort to repeal the ordinance, forced a special election in 1991. In the face of a well-financed publicity campaign to overturn the smokefree legislation, the citizens of Greensboro came back even stronger in support of the ordinance, voting to retain it by seven to one.

In the Polling Booth

There are now several States and hundreds of municipalities that have enacted smokefree air legislation and regulations, many after public referendums or high-profile public debates. For instance, Boulder, Colorado voters approved a total ban on smoking in stores, workplaces, restaurants, and bars by a 55 percent vote in 1995. Other communities where voters approved tobacco controls include Wichita Falls, Texas; Long Beach, California; Flagstaff, Arizona; and, as described above, Greensboro, North Carolina.

(Please see the Legislation, Regulation, and Litigation section for a list of State and local laws and the Especially For section for more information on popular support for smokefree policies in specific sites.)

POLICY PREVALENCE

"Nearly two-thirds of all workers reported that their employer did not permit smoking within their work area."—National Cancer Institute, 1996

The waitress with a cigarette dangling from her mouth as she wipes the counter . . . the college professor smoking his pipe as he lectures to students . . . the company president pictured in the annual report, caught in a thoughtful pose with his cigarette . . . the reporters in the smokefilled newsroom—these images are dated. Workplaces and public places are becoming smokefree places.

There have been two notable progressions in these changes. Most of the early smokefree policies were in "workplaces"—offices and factories. Then other places, including hospitals, schools, public transportation, restaurants, and shopping malls joined the movement.

The pioneers in the move to establish smokefree policies tended to be small companies, not surprisingly, because they tend to be more flexible and more innovative. These first, few decisionmakers to make their companies smokefree environments were often individualistic entrepreneurs, even mavericks—strong people willing to try new ways. Then larger companies followed suit. With substantial workforces, which included medical directors and corporate attorneys, they were both motivated and able to respond to the growing medical and legal information. Today, most larger organizations are smokefree. Now smaller organizations, the bulk of whom were not among the pioneers, are catching up.

Evaluations of Policy Prevalence

The first comprehensive estimate of the prevalence of smokefree workplaces throughout the United States, based on interviews with more than 100,000 workers, was conducted in 1992 and 1993 by the U.S. Department of Labor. Overall, 81.6 percent of employees reported that their employer had some policy to restrict smoking; 46 percent reported a total prohibition of smoking in the workplace. Nearly two-thirds reported that their employer did not permit smoking within their immediate work area. White-collar workers were more than one-and-a-half times as likely as service workers and nearly twice as likely as blue-collar workers to be covered by a smokefree policy. Employees in health care occupations enjoyed the highest percentage of smokefree workplaces; food-service workers were least likely to have a smokefree workplace.

Other studies, conducted by publications, government agencies, and business groups, amplify this major evaluation by the Department of Labor and indicate the proliferation of smokefree policies. Most studies have focused on office workplaces.

(Please see the Especially For section and the Smokefree Workplaces and Public Places lists for more information in specific sites.)

National Studies

- Eighty-five percent of more than 800 companies surveyed had nonsmoking policies in place, up from 36 percent, according to a 1991 survey by the Society for Human Resource Management and the Bureau of National Affairs. More than one-third were entirely smokefree. Respondents cited their reasons for initiating smokefree working environments—concern about employee health and comfort (79 percent), employee complaints (59 percent), and State and local laws (36 percent). A survey of 50 Fortune 500 companies, conducted by Corporate Health Policies Group, Inc., found that 56 percent of the companies either banned indoor smoking completely or limited it to a few, well-ventilated, designated smoking areas. Both studies indicated many companies were planning to make their policies more comprehensive.

- A 1992 survey by the Office of Disease Prevention and Health Promotion of the U.S. Department of Health and Human Services determined that 87 percent of worksites had formal tobacco control policies and 34 percent were totally smokefree. A later study by the Department, in 1993, reported smokefree workplaces in more than 57 percent of worksites.

- Smokefree workplaces increased by 24 percent, from 32 percent in 1991 to 56 percent in 1993, according to a 3-year survey conducted by U.S.A. Today.

- The International Facility Management Association surveyed its members and found that 71 percent of workforce facilities didn't allow smoking in any areas of their buildings, up from 42 percent in 1991, according to a report in the *Daily Camera Colorado*) in February 1995.

Local Studies

- A 1992 study by *Colorado Business Magazine* found that 67 percent of Colorado's top 200 corporations were entirely smokefree.

- Fifty-three percent of Massachusetts adults work at companies that ban smoking indoors, according to the 1993 Massachusetts Tobacco Survey. The survey also found that small employers were less likely to eliminate smoking. In Boston, 64 percent of companies with 50 or more employees reported they had bans. (That survey also found that in 46 percent of smokers' homes there was no smoking permitted indoors.)

- In Union and Essex Counties in New Jersey (which contain the cities of Newark and Orange, East Orange, South Orange, and West Orange), all but one of 43 companies with more than 1,000 employees were totally smokefree, according to a 1994 study by the American Stop Smoking Intervention Study (ASSIST), a Federal project. Based on evaluations of 208 worksites with 500–999 employees in 1995, ASSIST determined that 135, or 65 percent of the smaller companies, were smokefree.

SMOKEFREE POLICIES REDUCE SMOKING

"Before Procter & Gamble went smoke-free, it calculated 'persona, efficiency' would be cut by more than 13 percent if an employee took six 10-minute smoke breaks a day. But productivity is no longer an issue: Fewer employees smoke, says spokeswoman Linda Ulrey."—USA Today March 1994

The primary reason for adopting a smokefree policy is to provide a safe and healthful environment. But the welcome secondary effects of smokefree policies are several: They encourage smokers to choose to become nonsmokers; they reduce the number of cigarettes smoked by employees who continue to smoke; and they help former smokers to remain nonsmokers.

One of the earliest studies that verified these common sense results was published in the *American Journal of Public Health* in 1981. But since then, other studies have reinforced these findings.

A 1991 study by the University of California School of Medicine determined that employees who smoked consumed 45 fewer packs of cigarettes per year if they worked in smokefree workplaces. That study (*Archives of Internal Medicine*, June 1993) also found that smokefree workplaces had significantly fewer regular smokers than workplaces that allowed smoking (13.7 percent compared to 20.6 percent). In addition, more comprehensive nonsmoking policies were associated with more willingness of smokers to contemplate quitting.

In another study, smokers in worksites with a mandatory smoking ban reduced their total smoking on average by one pack a week, or 15 percent. (*American Journal of Public Health*, May 1994, p. 8)

Hospitals, among the first non-office worksites to create smokefree policies, have many health policy analysts in their community to track results. They found similar changes:

- In Baltimore, Johns Hopkins Hospital found a 20 percent reduction in the number of cigarettes smoked per day and 51 percent reduction in the number of cigarettes smoked during work hours following the implementation of its smokefree policy. The Hospital also reported a 25 percent decrease in smoking prevalence (from 22 percent to 16 percent). Its study appeared in the Summer 1993 *Tobacco Control*, an international journal.

- One year after the Ochsner Clinic in New Orleans implemented a smokefree policy, employee smoking prevalence dropped from 22 to 14 percent and, of those who continued to smoke, 81 percent smoked fewer than eight cigarettes per day. At New England Deaconess Hospital, 26 percent of previous smokers became nonsmokers, following a new smokefree policy, and a third of remaining smokers reduced their cigarette consumption (*Chest*, 84:206, 1983).

- In the first year after a smoking ban was instituted at the Harvard School of Public Health, 27 percent of the smokers there quit smoking. In smokefree hospitals, 36 percent of employees who quit smoking attributed their decision to the smokefree policy. (*Archives of Internal Medicine*, January 1991, p. 32)

Telephone operating companies were among the first companies to adopt smokefree policies and gain the benefits. A 1991 survey of New England Telephone Co. employees found that a smokefree policy helped them become nonsmokers. Twenty months after the company eliminated smoking on the job, 21 percent of the smokers had become nonsmokers, compared to a normal annual quit rate in comparable population groups of 2 to 5 percent. Forty-two percent of the successful quitters attributed their smoking cessation to the company policy.

In Australia, workplace smoking bans also reduced rates of smoking, particularly among heavier smokers, who reduced their consumption by more than 25 percent. ("Effects of Workplace Smoking Bans on Cigarette Consumption," *American Journal of Public Health*, February 1990)

The benefits of smokefree policies are increased when coupled with vigorous education. The U.S. Air Force, which is pursuing a policy and education program with the goal of creating a tobacco-free Air Force, reduced smoking prevalence from 44 percent in 1982 to 29 percent in 1992.

COMMON SENSE

"It's illegal to burn leaves outdoors. How come people are burning leaves indoors where I work?"—Jeff May, school teacher, New Jersey

Individuals and organizations may be apprehensive about creating smokefree air policies. There are several possible reasons: Society has allowed smoking considerable social respectability; cigarettes are one of the most heavily advertised products; the tobacco industry is a powerful political force; and smoking, like any addiction, is difficult to deal with in a sensible manner.

Common sense is an important American value, and it can be valuable in effecting change. The tobacco industry attempts to thwart smokefree policies by challenging the results of scientific studies or twisting the issue into one of civil liberties to distract attention from the public health problem. Policy makers can counter these tactics by helping people employ their common sense: People know that clean air is better than dirty air, that smoking kills, that freedom of choice is better than involuntary smoking.

To help decisionmakers overcome hesitation, to change attitudes about tobacco, and to increase acceptance of smokefree air policies, here are some common sense perspectives.

Re-thinking the Status Quo

It is difficult to look objectively at something that is part of the status quo.

The scenario below offers an adventure in attitude role-playing, a chance to see the status quo in a new light:

A representative of Life Cigarette Company comes to a manager saying, "We'd like to market our product in your company. It comes in these nifty packets with pretty designs and fancy wrappings. This is an American agricultural product. Our Founding Fathers grew it; our country was sustained by it in our earliest days. It contains no calories, fat, or cholesterol. It's low in sugar. We will supply machines to dispense the product conveniently to your employees and customers."

"Of course . . . one-third of your employees who use our product will get heart disease and one out of ten of the users will suffer lung cancer, a disease that was almost unheard of before our product. users will be absent from work twice as frequently as nonusers. Half of all long-term users will die prematurely because they

consume our product. People using our product also will make nonusers ill and will make them angry. Nonusing employees or customers, who are in the majority, may sue you for protection from our product. Pollution from our product will damage delicate electronic equipment in your company. You will have more fires. Carpets will be burned. There will be increased ventilation problems.

Hazardous Substances

Tobacco smoke can be compared to other substances in the environment, using standards applied to other toxins. It is not completely known what is in cigarette smoke. Tobacco companies have eluded Federal laws and regulations requiring disclosure of ingredients. As John Banzhaf, Professor of Law at George Washington University and Executive Director of Action on Smoking and Health, says, "I could go out tomorrow and manufacture a cigarette made of tobacco, saccharin, arsenic, and horse manure, and I'd be subject to almost no government regulation." (In August 1996, Massachusetts became the first State to require tobacco companies to disclose the ingredients and nicotine yield levels of their products.)

Among the constituents of tobacco smoke that have been identified, the two best known are carbon monoxide and nicotine. The American Lung Association reports that an office worker sitting next to a two-pack-a-day smoker is exposed to carbon monoxide levels twice as high as allowed by the Occupational Safety and Health Administration in industrial settings. Nicotine is almost omnipresent in the blood and other bodily fluids of nonsmokers. (Please see the Health section for more information.) Ammonia, used in toilet cleaners, and hydrogen cyanide, used in gas chambers, are present in tobacco smoke. If judged by the standards applied to other environmental toxins, tobacco smoke would be deemed a hazardous substance.

Employee/ Student Assistance Programs

Administrators respond to other health problems and other drug addictions that affect their employees, students, or customers. They offer inoculation, education, incentives for good health choices, testing, and drug withdrawal programs. One of the most important lessons communicated in those programs is that people who allow others to continue their addictions are enablers of addiction. Organizations without smokefree air policies are enablers of nicotine addiction.

Providing for Citizens Who Have Disabilities

Workplaces and public places provide special facilities, ramps and wheelchair-accessible toilets, for people with disabilities. Often it's very expensive to provide these accommodations. However, another group of individuals with disabilities is overlooked: People with health problems such as asthma or heart disease are at risk in a smoke-filled environment. Ironically, they could be accommodated at little or no expense.

Freedom of Choice

Jacquelyn Rogers, the founder of Smokenders, recognizes that smoking is compulsive. But she points out that breathing is involuntary. A smoker can use alternative nicotine delivery systems postpone a smoke, refrain from smoking, step outside to smoke, or choose to become a nonsmoker. A nonsmoker cannot choose to refrain from breathing for an hour in a restaurant or 8 hours at work.

A Legal Product

Tobacco industry spokespeople argue that tobacco is a legal product. The "legitimacy" of tobacco needs some rethinking. If tobacco were a new product, it would not be allowed to be introduced into commerce today, given what is known about it. If decisionmakers were hindered by history, there would never be change and improvement. Child labor and slavery would still be legal.

Tobacco is really a quasi-legal product. Special licenses are required to sell it. Cigarettes can't be advertised on the airwaves. Some jurisdictions have banned billboards and other tobacco promotions. The FDA has promulgated controls on tobacco marketing. It's illegal to sell tobacco to minors. Tobacco use is forbidden in many places. A more accurate statement is that tobacco is a dangerous, controlled substance like alcohol and firearms. Indeed, the Federal government groups them together in the Bureau of Alcohol, Tobacco, and Firearms.

The Parallel with Alcohol

Alcohol and tobacco, the most widely used drugs, are the most destructive drugs. A useful parallel exists in the process of change society is pursuing about alcohol. There is a growing awareness about how destructive alcohol is and changes are underway to reduce its harmful impact. Legislatures are raising the drinking age and increasing penalties for drunken driving. Employers are offering more treatment

programs for alcohol-addicted employees and eliminating the use of alcohol at company parties. People are being urged to provide nonalcoholic drinks at parties and to say "No" to friends who want to drive when drunk.

Similarly, society is recognizing that tobacco's toll is much greater than previously thought. Communities are stepping up efforts to ensure that children remain nonusers, and that nonsmokers are protected from secondhand smoke. Employers and managers of public places are creating smokefree policies. People are eliminating ashtrays from their homes and putting up signs saying "Welcome to another smokefree home."

THE TOBACCO INDUSTRY

"We are, then, in the business of selling nicotine, an addictive drug. . . ."—Memo, Brown & Williamson tobacco company, general counsel's office. July 17, 1963

Decision makers creating smokefree environments may encounter tobacco industry arguments and tactics. Four major tobacco industry strategies are:

- challenging the scientific information on smoking and ETS
- using arguments that divert attention from the health issue
- using (or creating) other groups to advance its position
- using its economic and political power.

Challenging the Scientific Information

Executives of the seven major United States tobacco companies, standing in a row, hands raised, swore they believed that smoking is not addictive. That was the sight facing a congressional committee in the spring of 1994. It seemed like something from a Doonesbury cartoon but it was just a standard tobacco industry ploy carried to the extreme. Overt denials of scientific facts are part of the industry strategy to create doubt.

The industry goes one step further by creating its own "science." The industry sponsors symposia with research done by industry-funded, sympathetic scientists; those symposia produce results that are not peer reviewed or in agreement with reputable studies. Then the findings of these symposia are published and widely disseminated, including in paid advertisements in major newspapers and magazines. "To read this material is to enter a house of mirrors that endlessly reflects the same set of opinions, voiced by the same few people, again and again," according to an analysis in *Consumer Reports* (January 1995).

Another seemingly scientific tactic used by the tobacco industry is the invention of "cigarette equivalents." These calculations are used to show deceptively low levels of toxic contaminants in ETS. The numbers selectively omit several carcinogenic substances and don't factor in the higher levels of contaminants found in sidestream smoke, the main component of ETS. *Consumer Reports* concluded, "If secondhand tobacco smoke were not connected to the profits of a powerful industry, we doubt there would be much argument about drastically restricting people's exposure to it."

This tobacco industry "jury is still out" tactic does create confusion, or at least the semblance of a controversy, which influences the public and the press. Americans have a strong sense of fair play and value hearing both sides of an issue. The media reflexively turn to the industry for "the other side" whenever new scientific information on smoking and ETS is published. Dr. Alan Blum, a professor of family medicine at Baylor University and an internationally recognized tobacco industry watcher, describes the situation this way: Imagine all mathematical and educational experts agree that two plus two equals four. But one industry, with a vested interest, insists that two plus two equals six. The media report "both sides" and people tend to think the truth may be somewhere in the middle, perhaps two plus two equals five.

Using Distracting Arguments

The tobacco industry uses other arguments to divert attention from the health information. A former tobacco industry lobbyist, Victor Crawford, went public about this tactic in early 1995, when he was dying of multiple cancers from his smoking. On "60 Minutes," in a letter to Ann Landers, in *JAMA*, and in a story in the *Washington Post*, he described his technique, "So, I'd always say, 'Well, the jury's still out on the health stuff but that's not the real issue. The real issue is freedom of choice, freedom of choice, and these health Nazis want to take it away!' I could make a hell of an argument. And I was smooth."

Arguments about smoking as a "right" and an "adult choice" and pleas for "common courtesy" and "freedom from intrusive government" resonate with many Americans. But "right" is not a word usually applied to addiction and public health problems. Americans don't support "alcoholics' right to drive their cars, unfettered by big brother government" or "heroin users' freedom of choice." The tobacco industry in-

vokes "adult choice" to describe smoking but neither word is accurate: Almost all smoking begins in childhood; more than \$6 billion a year in tobacco promotions overwhelm health information and make informed choice unlikely; addiction overcomes selfcontrol. As F. Ross Johnson, former chief executive of R. J. Reynolds tobacco/ Nabisco put it, "Of course [tobacco's] addictive. That's why you smoke the stuff." (*Wall Street Journal*, October 6, 1994)

The industry's recommendation of "common courtesy" as a solution to the problems of ETS, rather than "intrusive government," is disputed by public health authorities. Ronald M. Davis, M.D., former director of the U.S. Office on Smoking and Health, concluded, based on results of the 1987 National Health Interview Survey on Cancer Epidemiology, that ". . . the common courtesy approach endorsed by the tobacco industry is unlikely, by itself, to eliminate exposure to environmental tobacco smoke. . . . Legislative or administrative mechanisms are the only effective strategies to eliminate passive smoking." *Journal of the American Medical Association*, April 25, 1990)

Again invoking "freedom of choice," the industry suggests dealing with ETS by ventilation or separate sections, both of which have been proven ineffective. The bottom line of industry arguments is apparent in the effect of their "solutions"—there will be no reduction of smoking and no loss of income to the tobacco industry.

Meaningful controls do affect industry profits. A study in California (funded by the State with research money raised from cigarette taxes) estimated that 146 million fewer packs of cigarettes per year would be smoked if all workplaces in California were smokefree. That would cause tobacco companies to lose \$406 million annually. Those calculations, by Tracey J. Woodruff, Ph.D. and others, published in the *Archives of Internal Medicine*, June 28, 1993, echoed the statement 15 years earlier by William Hobbs, president of the R. J. Reynolds tobacco multi-national. Speaking of nonsmoking policies, he said, "If they caused every smoker to smoke just one less cigarette a day, our company would stand to lose \$92 million in sales annually." He went on to say, "I assure you that we don't intend to let that happen without a fight." (*Financial Times*, September 27, 1978)

Hiding Behind Other Groups

Aware of its poor credibility, the tobacco industry seeks to have its arguments advanced by more respectable groups and organizations in society. The Tobacco Institute has used some business and labor groups to further its cause. Several versions of a booklet called "Workplace Smoking: a Guide For Employers" have been distributed by State chambers of commerce or other business groups, with no disclosure that the publication was prepared and financed by the tobacco industry. Similarly, the "Tobacco Industry Labor Management Committee" published "Workplace Smoking Issues." These and similar publications can be recognized because they ignore or dispute the public health question, posit a "right" to smoke, and recommend "solutions" which result in little or no reduction in smoking and tobacco industry profits.

Early in 1996, a Federal grand jury in Alexandria, Virginia began looking into the relationship between the tobacco industry and a building inspection firm that has appeared at many public hearings, including before congressional subcommittees, testifying that secondhand smoke is not a health risk. The company, Healthy Buildings International, received several million dollars from tobacco companies and may have falsified data on secondhand smoke.

In California, Philip Morris spent \$20 million to set up Californians for statewide Smoking Restrictions. The group created a ballot question, Proposition 188, which purported to be a pro-health initiative, but which would have required the re-institution of smoking sections and reversed laws aimed at keeping tobacco from minors. The *Los Angeles Times* identified that campaign as "a complete fraud." The *San Francisco Chronicle* reported that "Tobacco companies are trying to pull a fast one," and said, "It is another attempt by the shameless tobacco industry to ensure future sales of a deadly product."

Restaurant associations have been fabricated to defend the interests of the tobacco industry. On June 6, 1994, in written testimony to the New York City Council, which was considering smokefree legislation, Barry Fogel revealed, "In 1988, Beverly Hills passed one of the first smokefree restaurant ordinances in the Nation. It was rescinded 5 months later due to lobbying from the Beverly Hills Restaurant Association. I was president of the Association.

"There was no Beverly Hills Restaurant Association before the smokefree ordinance. We were organized by the tobacco industry. The industry helped pay our legal bills in a suit against Beverly Hills. The industry even flew some of our members by Lear Jet to Rancho Mirage, another California city considering smokefree restaurant legislation, to testify before their City Council against a similar

smokefree ordinance.” The story of the Beverly Hills Restaurant Association and Restaurants for a Sensible Voluntary Policy (RŠVP), also created by the tobacco industry, is analyzed in “The Politics of Local Tobacco Control.” (*Journal of the American Medical Association*, October 16, 1991)

More recently, after the 1995 passage of the New York City smokefree air act, Philip Morris created the Manhattan Tavern & Restaurant Association; the United Restaurant, Hotel, Tavern Association; and New Yorkers United to Repeal the Ban. None of these “organizations” even have a telephone number in New York City.

The JAMA study (above) also documents another tobacco industry tactic: lying. Restaurant associations created by the tobacco industry have published statements claiming a 30 percent decrease in business when laws requiring restaurants to be smokefree were enacted. But independent, scientific, government-funded studies, analyzing the impact of every nonsmoking restaurant ordinance throughout the Nation, based on restaurants’ tax returns, have shown no loss in business. (“The Effect of Ordinances Requiring Smoke Free Restaurants on Restaurant Sales,” *American Journal of Public Health*, July 1994).

Barry Fogel, of the fabricated Beverly Hills Restaurant Association, discovered that himself. His testimony to the New York City Council concluded, “I regret my participation with the tobacco industry. In 1991, when I learned that secondhand smoke caused cancer, I made all [my] Jacopo’s restaurants 100 percent smokefree, including bar and outdoor patio areas. Even in this difficult economic climate, our sales have risen.”

People who smoke also are recruited by the tobacco industry. Taking a lesson from the success of ‘grassroots nonsmokers’ advocacy groups, several tobacco companies have supplied funding, equipment, consultants, toll-free phone lines, and glossy publications to foment “smokers’ rights organizations.” “Public Interest Pretenders” (May 1994) reveals how the tobacco industry creates what Consumer Reports characterizes as “bogus ‘grassroots’ organizations.” (The American Nonsmokers’ Rights Foundation has created a tobacco industry database to help expose business groups and “expert” witnesses that are tobacco industry fronts. ANRF is in Berkeley, California, phone: 510 841-3032.)

Where Does an 800-Pound Gorilla Sit?

The tobacco business in the United States is a \$50 billion industry. Revenues of that magnitude give the companies enormous economic and political clout—and they use it. In 1992, the tobacco industry contributed \$5.6 million to political candidates for Federal office. It spent \$600 million in legal fees. (*American Bar Association Journal*, September 1994) Common Cause researched tobacco industry companies and lobbying groups over the decade 1985-1995 and discovered more than \$16 million in soft money contributions and political action committee contributions during the decade. Common Cause noted that it was a time of increasing public information and concern about smoking and tobacco, but a time of relatively little congressional action on anti-tobacco legislation. In the first 6 months of 1996, the tobacco industry spent more than \$15 million to fight Federal proposals to reduce smoking by minors, raise tobacco taxes, and limit tobacco advertising and marketing.

When Northwest Airlines became the first United States airline to adopt a smokefree policy for its domestic flights, it turned to its advertising agency, Saatchi & Saatchi, to design the public relations campaign announcing the new policy. Saatchi & Saatchi also was the agency for RJR/Nabisco (R.J. Reynolds tobacco)—which summarily withdrew their Oreo and Fig Newton accounts from the agency.

When New Jersey towns, following the lead of East Brunswick in 1990, began passing cigarette vending machine bans, almost every town council that enacted legislation was challenged in court by the tobacco industry. Even after the New Jersey Supreme Court upheld East Brunswick, and 100 additional municipalities passed ordinances controlling tobacco sales, the industry came back with another lawsuit, citing new grounds, against Westfield, New Jersey. Though the industry lost in Westfield, and never appealed, it then sued six more towns. An experienced courtwatcher called the tobacco industry intimidation a “scorched earth policy.”

The tobacco industry also has sued towns that passed smokefree air ordinances. Although almost all these lawsuits failed, the threat intimidates local governments. The tobacco industry sued the U.S. Government when the Environmental Protection Agency published its report on ETS. “It’s like the flat earth society suing the Government because NASA publishes pictures from space which show that the earth is round!” said Cliff Douglas of the Advocacy Institute, Washington, DC. Now the tobacco industry is suing to block the Food and Drug Administration, which has asserted jurisdiction over tobacco.

The Truth About the Tobacco Industry

One person who has seen more of the industry's internal documents than almost anyone outside the tobacco industry is Federal Judge H. Lee Sarokin. He presided over the Cipollone case, the landmark tobacco products liability suit. Judge Sarokin concluded that ". . . tobacco companies willfully ignored the dangers of smoking and conspired to misrepresent health issues." He asked, "Who are these persons who knowingly and secretly decide to put the buying public at risk solely for the purpose of making profits and who believe that illness and death of consumers is an appropriate cost of their own prosperity!"

A similar conclusion was reached by the *News & Record* in Greensboro, North Carolina, home of one of the world's largest cigarette factories. In an editorial in September 1992 it said, "You don't have to be an anti-smoking zealot to work up a healthy contempt for the tobacco industry. All you need is a shred of respect for the truth."

INEVITABILITY

"This is where the rest of America is going."—New York City Mayor Rudolph W. Giuliani, signing legislation to eliminate smoking in most public places, January 1995

The Future

The question is not if, but when any organization will go smokefree. With increasing legislation, regulation, litigation, scientific information, and public demand for smokefree environments, smoking in public places and workplaces will soon become rare. Ashtrays, like spittoons, will become collectors' items. In 1904, when the Pennsylvania legislature passed a law making public spitting illegal, Governor Samuel Pennypacker vetoed the legislation, declaring, "It is a gentleman's constitutional right to expectorate." Arguments for a "right to smoke" will soon seem equally anachronistic. Policy makers who adopt smokefree policies today can prepare their organizations for inevitable change and gain positive public relations benefits.

If They Can Do It . . .

Smoke-filled newsrooms are rapidly disappearing. Ad agencies are smokefree. Smoke-filled political caucuses? Many legislatures are now smokefree. Even bars, clubs, cabarets, pool halls, casinos, and bingo halls are going smokefree. There are smokefree psychiatric units and drug addiction treatment programs. There are smokefree truck lines, airlines, airports, and hotels. The Minnesota Vikings are smokefree, as is the Pennsylvania Ballet. All the tobacco farmers interviewed in a *New York Times Magazine* feature article about the fate of tobacco farmers in North Carolina were nonsmokers (August 25, 1996). And there's no smoking in the food court of the building that houses the Tobacco Institute in Washington, DC.

THE LARGER PERSPECTIVE

"For every person who stops smoking in the North [developed nations], two start smoking in the South [developing nations]."—Leonardo Daino, Argentine League Against Cancer

Nicotine addiction continues at epidemic proportions. In the United States, smoking by children and adolescents is rising. In early 1996, the Centers for Disease Control reported a 7 percent increase since 1991, with approximately 35 percent of youth smoking. Smoking among African-American males doubled in that same time.

The World Health Organization 1996 report, "The Tobacco Epidemic," predicted that worldwide deaths from smoking, currently estimated at three million per year, or one death every 10 seconds, could rise as high as 10 million per year within the next 25 years. These figures do not include deaths from secondhand smoke. Half of the current 1.1 billion smokers worldwide will die prematurely from tobacco-related diseases, especially those who began smoking at an early age. "Tobacco companies are clearly winning the battle for the hearts and lungs of most of the peoples on planet Earth," in the words of Sonni Efron, *Los Angeles Times* (September 9, 1996).

Sir Richard Doll of the Imperial Cancer Research Fund described it as "the biggest epidemic of fatal disease in the world." And Dr. Alan Lopez of the World Health Organization said, "What we've seen so far is nothing compared to what we'll see in developing countries."

Beyond the devastating health impact, tobacco dollars interfere with journalistic freedom and create cynicism about the responsiveness of government.

One important reason children start to smoke and adults choose not to confront their nicotine addiction is that they live in a society where smoking seems normal. Smokefree environments throughout society reinforce the no-smoking education

given to children in the classroom and strengthen the desire of smokers to become nonsmokers.

There are strategies that do work to reduce smoking, especially among children: elimination of tobacco marketing; vigorous pro-health/anti-tobacco advertising; increased tobacco taxes; and smokefree environments.

ESTABLISHING A POLICY

Establishing a smokefree policy is much the same as establishing any other policy. The basics include demonstrating enthusiastic support from top management, involving employees and others affected by the change, making sure all questions are addressed, giving advance notice, providing adequate information about the new policy, and being firm once the policy is implemented. Your organization probably has its own internal procedures for creating new policies.

The biggest hurdle is making the decision to create a smokefree environment. But not addressing the issue is likely to intensify the problem.

Because smoking is an addictive behavior and social norms have tolerated it for years, change in this area warrants care about process. (A formula for problems: lack of information and lack of advance notice.)

Organizations and advisors involved in developing new policies have come up with some ideas that may be helpful to you. Here are their suggestions.

Vocabulary

Call the new policy a "smokefree air policy" or a "policy for clean indoor air" rather than a "smoking policy." This establishes the idea that smokefree is the norm and that the policy addresses if, or where, smoking will be permitted.

Don't label people as smokers and nonsmokers. Refer to "employees or customers who smoke." Make it clear that individuals and their smoking behaviors are separable and that it is smoking that will be controlled, not smokers.

Avoid using the word "right" in connection with smoking. Say "using tobacco" or "smoking behavior" or "nicotine addiction." "Right" implies legal and ethical entitlement to smoke; it endows smoking with respectability. Your vocabulary should refer to smoking as a public health problem.

Use positive words like "comprehensive" and "protection" instead of negative words like "more restrictive" and "ban."

Research

Assess your organization's situation. Determine the prevalence of smoking among employees, customers, students, and others who use your facilities. What problems are being encountered by your organization because of smoking?

Determine how well your facilities are suited for proposed changes. If your grounds will not be smokefree, is there a suitable area outdoors for smoking? It should be away from entrances, windows, and air-intake vents. If you are considering separately enclosed, separately ventilated indoor areas for smoking, estimates for such "lounges" run to \$100,000 and more. You'll need to decide what signs to use, and obtain or design them. Ashtrays must be removed from smokefree areas and receptacles for cigarettes provided at appropriate places, not too near entrances.

Timing may be important, too. It may be easier to go smokefree in the summer when people can step outside to smoke. Or you may want to tie the introduction of your smokefree policy to your annual meeting or a new fiscal, academic, or calendar year. Another good time is the American Cancer Society's Great American Smokeout, which is held the Thursday before Thanksgiving.

One progressive section or division of your organization can try a pilot program first. Once it's completed, that experience can guide other sections.

Education

When MSI Insurance announced its smokefree policy, it issued an internal memo which started this way: "The loss of the lives of over 200 marines in Lebanon several weeks ago shocked and angered us all." The message went on to compare that death toll to the loss of 1,300 Americans who die prematurely each day because of tobacco use. Comparing tobacco's death toll to a current disaster helps people to recognize the enormity of the tobacco problem and to respond to it more personally.

When the North Plainfield, New Jersey town council first considered enacting tobacco controls, every member of the council reminisced about their early experiences with cigarettes. One council member told how she bought cigarettes as a teen, worrying that shopkeepers would tell her father, the mayor. Your educational task, if you encounter people with fondly remembered, rite-of-passage stories, is to help them look further into the future, to connect their early experiences with later experiences of friends dying prematurely from lung cancer and heart attacks.

Educate people who don't smoke to be gentle with people who smoke. It's not easy to go without nicotine, so those working around people who are quitting or limiting their smoking should be understanding and supportive.

When Group Health Cooperative in Washington went smokefree, it prepared a film for its 6,000 employees. The film included interviews with employees who smoked, explaining why they supported the policy. Your educational program in advance of the implementation of the new policy can use films, talks, your newsletter, posters, paycheck inserts, questionnaires, news releases, and signs.

Changing Attitudes

Changing your own attitude may be the most important educational task you'll perform. The social acceptance that has enabled smoking to become pervasive and destructive in our society can cause individuals involved in changing behaviors regarding smoking to experience trepidation. Accept that as part of the process of change; your discomfort is a signal that your actions are significant. (Please see the Common Sense section for arguments that support your actions.)

Organizational Image

Take advantage of your organization's image or mission to underscore your smokefree policy. This is a natural for health and welfare institutions, schools, restaurants, insurance companies, and sports facilities. But others can use this strategy. Banks can use financial data in their educational materials; retail companies can use marketing data.

Provident Indemnity Life adopted its smokefree policy because it markets insurance policies with discounts for people who don't smoke; it didn't want its customers offended by smoke in its offices. The Merle Norman Cosmetic Company told employees that one of the reasons for instituting its smokefree policy was to be consistent with its role of enhancing beauty.

Expand Involvement

Create bonds between smoking and nonsmoking employees. For instance, pair quitting smokers with dieting buddies or employees on exercise programs. Give employees who recruit smokers for cessation programs a bonus. Provide chewing gum, sunflower seeds, or other snacks for nonsmoking employees to give to employees who smoke. Suggest that nonsmokers also dispense encouragement and thanks, too. Dow Chemical paired quitting smokers and nonsmoking buddies in a raffle for a motorboat.

Involve families. Invite employees' families into cessation programs. In the words of one manager, "You don't want your employees who are trying to quit smoking going home to a smoky ghetto. Andrew Smith, President of Pacific Northwest Bell, decided to offer cessation classes to employees' families because the company provided health benefits for them. The response of one employee's spouse was, "Phone company, I love you. My own employer wouldn't provide me with a cessation program, but I got help from you."

When he announced his new smokefree policy, in the 1970's, Radar Electric President Warren McPherson sent letters to the families of employees who smoked. In his message, he provided an estimate of how much smokers spend each month for cigarettes and he offered a bonus to smokers who would quit smoking. Next, he showed the income that could represent in a family budget. Although many employers today might prefer a more subtle approach, cigarette costs in the 1990's make that an even stronger argument: At \$2.50 a pack, smoking two packs a day costs more than \$1,800 a year. (Note: If you decide to offer a bonus or other incentives, don't give the bonus to smokers who quit smoking. Instead, give the bonus to nonsmokers, who should be rewarded for good choices. Smokers can earn the bonus by becoming nonsmokers.)

Creativity

Any new policy is more likely to be welcome when it's implemented with creativity and humor. Small touches can be important in setting the tone you want to achieve.

When Robert Rosner was helping to implement a smokefree policy at Group Health in Seattle, he anticipated that employees at reception desks would have the main responsibility for confronting visitors who were smoking when they entered Group Health facilities. To give receptionists a positive task involving the new policy, he provided them with gifts featuring nonsmoking messages, to distribute to visitors.

When Kessler-Ellis Products in Atlantic Highlands, New Jersey went smokefree, it gradually reduced the smoking-permitted hours at work. First, the initial hour at work was designated nonsmoking. Next, the last hour of the day was declared nonsmoking. Then the hours before lunch and after lunch were added. During this

phase-in period, employees who smoked were given a few "smoking permit" tickets they could "spend" to smoke one cigarette during an otherwise forbidden period.

Another suggestion for success is to replace anything that's taken away. For instance, when you remove the cigarette machine, replace it with a fruit machine, an arrangement of fresh flowers, a health information reading rack, or a list of successful quitters. Riviera Motors in Portland, Oregon installed a refrigerator with vegetables for snacking; quitting smokers and dieting employees enjoyed that.

Fairness

It's hard to be fair when dealing with incompatible behaviors like smoking and breathing smokefree air. But for the sake of morale, it is important to respect the desire for fair play. Here are two common fairness issues that organizations have encountered when implementing smokefree policies:

Who is covered by the policy?

Campbell Soup Company made its offices smokefree years ago because its production areas were smokefree and it wanted an evenhanded policy for all employees.

MSI Insurance eliminated smoking in private offices so its smoking ban in group work areas would be more acceptable. It also recognized that employees from group work areas go into private offices in the course of their work. Furthermore, private offices rarely have private ventilation systems. Allowing smoking in private offices also creates an unnecessary equity problem and gives a message that smoking is a benefit.

It is tempting to fudge when it comes to smoking by customers. But the experiences of malls, sports facilities, restaurants, and other public places throughout the country demonstrate that smokefree policies don't hurt business. (Please see the Especially For section for more information about customers' acceptance of smokefree policies.)

Another fairness argument you can use is to point out that smoking is controlled in computer areas, in production areas, and in other places where equipment or materials might be harmed by exposure to smoke or fire. Fairness dictates at least as much concern for the well-being of people. Malcolm Stamper, President of the Boeing Co., used this reasoning.

Why this change in policy?

You may be told you're "changing the rules." Acknowledge that, perhaps with a reminder that change is a part of life. Sometimes employers ask employees to make drastic changes, such as moving to new locations. Landlords change the terms of leases. Restaurants change menus and prices. Point out that your organization makes policy changes to benefit employees, customers, and students. Also explain that the new smokefree policy is based on new information.

A Few Thoughts on Those Who Smoke

You can expect customers who smoke to comply with your smokefree policy (please see above). You have authority to ensure employee cooperation. The experience of other employers throughout the Nation demonstrates that compliance is good.

Some employees may say they will quit their jobs if they can't smoke at work. This almost never happens. If you don't encourage employees to reduce or quit smoking, you may lose them to heart disease or lung cancer. (Also, the lack of a smokefree policy may cause nonsmoking employees to leave for a new job in a smokefree workplace.)

Remember, smokers may be physiologically unable to understand how offensive ETS is, because smoking damages their sense of taste and smell. After two or 3 months as nonsmokers, many former smokers say: "I never realized I smoked up a room that way!" or "I never realized how bad smokers smell!"

Cessation Programs

While as many as 90 percent of smokers want to become nonsmokers, and one-third of smokers make a serious attempt to quit smoking each year, many fear failure and don't attempt cessation. Experts in the field now recognize that there is a continuum of attitudes and behaviors among smokers about cessation: Some are unwilling to confront the issue; some are thinking about it; some are actively attempting to quit; some are newly recovered nicotine addicts; and some have years of abstinence but may still feel urges to smoke from time to time.

Most smokers make several attempts to quit before succeeding. Each attempt teaches important things about becoming a nonsmoker. Most who quit do so without a formal program. The success rate for any single quit attempt with a group pro-

gram is in the range of 20 to 30 percent; nicotine replacement therapy augments the success rate.

Smokefree policies, especially at work, encourage smokers to confront their nicotine addiction. It is best to offer a variety of cessation methods and to offer them continuously, not just at the time of implementing a smokefree policy. (Please see the Smoking Prevalence and Smokefree Policies Reduce Smoking sections for more information.)

Excellent nonprofit programs, both group and self-administered, are available from the American Cancer Society, American Lung Association, American Heart Association, other health organizations, hospitals, adult education schools, health departments, and Seventh Day Adventist churches. For-profit programs advertise widely in the media and in the Yellow Pages. There are no licensing requirements for smoking cessation providers. A buyer-beware approach is recommended with for-profit providers, especially those that offer unproven techniques.

A good source of information is the Office on Smoking and Health of the U.S. Public Health Service, Atlanta, Georgia, 770 488-5705.

A TYPICAL SUCCESS STORY

In 1983, Fred Vandegrift was the publisher of the *Salina Journal*, a daily newspaper in Salina, Kansas. He'd been getting numerous complaints from employees who were bothered by smoking at work. So he decided to make the *Journal* a smokefree workplace, effective New Year's Day 1984. Vandegrift had some apprehension that the ban might offend customers and employees, but no problems materialized. Indeed, in the first quarter of the year the new policy was effected, only one cigarette was smoked in the building: A customer came in smoking, not noticing signs posted at all entrances, but politely returned outside to dispose of his cigarette upon request.

Vandegrift also offered a \$500 bonus to any smoking employee who quit smoking during the first 3 months of the year. Among the smokers: Fred Vandegrift. He'd quit several times in his life, but was smoking between two and three packs a day when he made the announcement of the impending ban. "Certainly the policy was an encouragement to me. I wanted to quit. It doesn't take a genius to know it's not good for you," Vandegrift said. The publisher wrote himself a \$500 check on April 1, 1984.

Twenty-five of his thirty-one employees who were smokers on January 1 also earned \$500 checks on April 1. The new ax-smokers thanked him for his help. One circulation department employee, who had once kicked the habit for a year on a \$5 bet, was particularly delighted with the \$500 incentive.

The real surprise, entirely unexpected, was public response to the new policy. The story made headlines nationwide. At least 20 radio stations and a half dozen TV stations called requesting to interview Vandegrift. Hundreds of letters poured in from all over the country. Other employers considering such a move themselves, or merely intrigued by the *Journal's* action, wrote requesting information. Workers from other companies wrote to applaud the *Journal* and say that they wished they had smokefree jobs, too. Vandegrift says 99 percent of the response was positive.

The story of the *Salina Journal's* new nonsmoking policy contains three elements usually encountered by companies that decide to go smokefree:

- They were apprehensive.
- Implementation of the policy was much easier than they had anticipated.
- They were flooded by good publicity and by positive responses from other employers and employees outside the company.

The *Journal's* experience also contains an interesting example of changing attitudes toward smoking: Fifty years ago, during World War II, a printer at the newspaper, Dick Levin, was in the Navy, stationed in the Aleutian Islands. The *Journal*, in a friendly gesture typical of the era, sent him five cartons of cigarettes. "Now," says Levin, a little perplexed, "they're offering me \$500 to quit."

The *Journal* did lose some cigarette advertising. They were also challenged by employees and the public to drop cigarette advertising altogether. Many felt that it was inconsistent to ban smoking, a health hazard, while continuing to accept income from cigarette promotion. So on January 1, 1985, the *Journal* dropped all cigarette advertising.

A year later, Fred Vandegrift retired. The new publisher, Harris Rayl, reported that the policy on smoking was no longer a matter for comment, but was accepted as the established way of business. The decision to refuse tobacco ads generated much positive support from readers; many said they had been offended by cigarette ads. Asked about the loss of income from the ads, Rayl said, "We do make a little less money. But it was a good decision, morally, and in terms of public relations."

This report first appeared in *Toward a Smokefree Workplace*, published by *New Jersey GASP* in 1985. It was updated in 1986 for the second edition. In interviews for *Smokefree Air Everywhere*, *Journal* publisher Harris Rayl and Business Manager Dave Martin gave updates on the newspaper's smokefree policy, reporting that the *Journal's* being smokefree is "fold news" and businesses without smoking control policies are now viewed as unusual.

The *Journal* is considering making its outdoor smoking area smokefree. Its beautiful patio, overlooking the Smoky Hill River, has been marred with cigarette butts. Publisher Rayl issued a statement announcing his intention to eliminate smoking if the problem continued, and Manager Martin says smokers are "Scrambling" to keep the area pristine.

A MODEL POLICY

[name of company or organization]

Smokefree Environment Policy

Medical and scientific authorities worldwide, including the U.S. Surgeon General and the EPA, have concluded that environmental tobacco smoke (ETS) is a cause of serious illness, including heart disease, lung cancer, other cancer, and respiratory disease in healthy nonsmokers. ETS is particularly harmful to children and to people who already suffer from respiratory disease, heart disease, or allergies. The only effective method to eliminate ETS-related health hazards is to eliminate environmental tobacco smoke.

Smoking also threatens safety. It is the leading cause of fire death in the United States and is associated with increased automobile and workplace accidents.

To create a healthful, safe, and comfortable environment [name of company or organization] will be entirely smokefree effective [date]. Smoking is prohibited in all indoor areas, including vehicles. [Smoking is prohibited on all company premises outdoors./Smoking is allowed outdoors only in designated areas.]

This policy applies to all [employees, customers, students, patients, tenants, visitors]. Copies of this policy will be distributed to all employees and signs will be posted at all building [premises] entrances and throughout all buildings and vehicles.

Any problems should be brought to the attention of the appropriate supervisor [manager] and handled through normal [personnel] procedures. Employees who violate this policy will be subject to disciplinary actions as prescribed in personnel policy.

This is one of the most important steps that we can take to improve our environment and support public health. We rely upon the cooperation of all.

[signature] [chief executive officer or other decisionmaking authority] [date]

A CHECKLIST FOR ACTION

This checklist contains steps that have been used by many organizations, especially larger organizations, as they have worked through the process to achieve a smokefree environment. It is offered to help you determine which actions might be appropriate for your situation.

- Top management is committed to going smokefree.
- Responsibility for the process is assigned to an individual with authority.
- Research begins.
- External research:
 - medical, legal, economic, and social information about tobacco and ETS
 - policies created by others
 - applicable local, State, or Federal laws, regulations, and case law
 - smoking cessation programs
- Internal research:
 - physical facilities (areas for smoking, facilities shared with other organizations)
 - existing policy on smoking
 - legal issues (union contracts, insurance, maintenance contracts)
 - anticipated responses of affected persons, including employees, customers, and others
- The organization announces its intention to create a smokefree policy.
- An implementation committee is created, including appropriate representatives—management and non-management; smokers, former smokers, and non-smokers; students, patients, etc.
- A schedule is outlined by the committee.
- Background education commences on the problems of ETS, tobacco as a public health problem, and why a new policy is being instituted.

- The committee drafts a proposed policy and implementation plan. (Three to nine months is a good time for transition for a large organization.)
- Appropriate individuals and groups review the policy and give suggestions.
- A policy is chosen.
- The selected policy and implementation plan are announced to all employees by a letter from the chief executive officer of the organization.
- Customers and others affected by the new policy are informed by appropriate methods.
- The policy is incorporated into the organization's personnel policy.
- Responsibility for administering and enforcing the policy is assigned and announced. A manager to whom people can report problems anonymously designated.
- Education continues via:
 - training sessions for managers
 - “feedback” sessions for employees, others
 - organization newsletter, paycheck inserts
 - signs, displays, materials
 - audiovisuals created internally or obtained elsewhere, shown at meetings, on monitors in lounges, health care waiting areas, etc.
 - mailings to customers, students, tenants
 - releases to public news media.
- Changes to facilitate the new policy are accomplished.
 - Signs are obtained or created and installed.
 - Receptacles for cigarettes are provided at appropriate places near entrances to smokefree areas.
 - Cigarette vending machines are removed.
 - Smoking areas are designated outdoors, well defined to avoid confusion and litter.
 - If indoor lounges are to be employed, they are constructed, enclosed and separately ventilated.
 - Cessation programs are selected, offered.
 - Changes in insurance coverage or maintenance policies are arranged.
 - Fitness breaks are initiated.
 - Healthful snacks are made available.
 - A more healthful menu is introduced in cafeterias, etc.
 - Other changes, including improvement of fitness facilities, are made.
- The policy is refined.
- The policy becomes effective.
- The policy is evaluated and revised.

EMPLOYERS

Why

An interdependence exists between employers and employees, so a smokefree workplace policy to protect the well-being of employees also contributes directly to the health and longevity of the company. Many employers provide employee health benefits and can realize financial savings from smokefree policies. Fortunately, employers are in an advantageous position to create smokefree policies because they have authority to set standards for employee behavior.

Recognizing employer-employee interdependence, courts have placed legal obligations on employers to provide safe and healthful working conditions and these obligations have been interpreted to include smokefree environments. Indeed, the first wave of plaintiffs seeking smokefree environments were employees. This trend is likely to intensify.

Legislation requiring smokefree environments has focused first on workplaces, along with health care institutions and places where children are present. A major reason Congress required airlines to eliminate smoking in flight was because airplanes were uniquely small and enclosed workplaces.

Small companies have a number of special concerns. First, most people work for smaller companies, so policies are necessary there to protect the majority of employees throughout the Nation. Second, ETS may be more hazardous in smaller facilities. Third, small companies are more likely to still allow smoking; most larger companies have already dealt with this problem. Fourth, a small company is more likely to have key, irreplaceable employees than larger companies. Losing an employee to a smoking-related disease, or having an employee leave the company for another job in a smokefree company, can be disrupting. Finally, economic losses from smoking are likely to loom larger for smaller companies.

How

Just as the creation and implementation of a new smokefree policy should follow the usual company methods for creating new policies, enforcement of smokefree rules should follow usual enforcement procedures. Deal with infractions as other personnel policy infractions are dealt with. If an employee takes too much time away from work to smoke, it should be treated in the same manner as if an employee took too many breaks for other reasons. (If extra breaks for smoking are given, nonsmoking employees may feel slighted.)

It is especially appropriate for employers to offer smoking cessation information and programs to help nicotine-addicted employees cope with new nonsmoking rules—employees spend long periods of time at work, and reduced smoking by employees usually leads to reduced expenses for employers. Offering employees' families cessation information and programs is also beneficial for two reasons: First, employees attempting to deal with their nicotine addiction need a supportive environment at home. Second, the employer may be providing health benefits for spouses and children; offering them cessation support is consistent with providing other health benefits and can help to lower the health care costs of family members.

GOVERNMENTS

Why

Governments, Federal, State, and local, have a responsibility to protect the health and well-being of their constituents. That's why governments should legislate smokefree environments for work sites, public places, and other establishments and facilities within their jurisdiction.

usually, governments set higher standards for their own sites than they impose upon nongovernmental work sites and public places. Thus, while not always in the forefront, Federal, State, and local governments are increasingly proving to be among the leaders in establishing smokefree policies in their own organizations. Governments need to make their own facilities smokefree before they enact legislation or regulations requiring other facilities to be smokefree.

Setting policies to protect citizens and employees in government buildings and mandating similar safeguards in nongovernment settings are also effective ways for governments to reinforce the nonsmoking messages they deliver through their education and health departments.

Finally, governments, like other employers and proprietors of public places, are subject to lawsuits and other actions if they do not protect their employees and customers.

How

Governments have many ways to set smokefree standards, including legislation, regulation, and policy decisions at the Federal, State, or local levels. They also have a variety of enforcement mechanisms available. Employees can be disciplined, even dismissed. Funding can be withdrawn from dependent government organizations. Contractors may be denied access to bid for government contracts. Citizens may be fined or receive stronger penalties.

Some employers or proprietors of public places provide separately enclosed, separately ventilated areas for smoking. If government facilities were to do this, the costs would fall upon taxpayers, the majority of whom are nonsmokers. In addition, to provide facilities that encourage smoking is inconsistent with other government efforts to discourage smoking.

SCHOOLS

Why

Smokefree policies are essential in schools and on school grounds because children are among those who suffer the most severe consequences from environmental tobacco smoke (along with people who have health problems and older people). In addition, schools have a greater responsibility to provide a healthful environment because of their role as protectors of students. Federal legislation (the Pro Children's Act) bans smoking in all public schools, private schools that get Federal funds, and other federally funded children's programs. Many States and local governments mandate smokefree schools and school premises.

States that mandate smokefree school buildings and grounds include Colorado, Hawaii, Illinois, Maryland, Minnesota, New Mexico, Vermont, Washington, and Wisconsin. States that have laws requiring smokefree school buildings include Connecticut, the District of Columbia, Florida, Kansas, Louisiana, Michigan, New Hampshire, New Jersey, New York, Rhode Island, Tennessee, and Utah.

Because students are still in their formative years, it is particularly important for educational institutions to reinforce health messages through example. If children are taught that smoking is dangerous, then the school should not allow smoking. If adults are allowed to smoke, that sends a message that smoking is a grown-up thing to do and makes smoking more attractive to children.

Any school policy that deters or postpones children's tobacco use contributes greatly to their health. Studies confirm that the earlier a person starts smoking, the more devastating the health consequences.

Colleges and universities are also accepting their responsibility to model smokefree messages. Hundreds of institutions of higher learning have established smokefree policies. In Georgia, for example, many of the State's 34 colleges and universities are smokefree indoors. North Georgia College became the first university in the State to ban all forms of tobacco use on its campus, indoors and outdoors, March 1, 1994. In the words of President Imas J. Allen, "We have to set an example and practice what we preach."

An important but often overlooked reason for eliminating smoking in schools is to prevent fires, which can be particularly catastrophic where children are present.

How

The board of education or school directors should make it clear that the purpose of a smokefree policy, besides protecting health and safety, is to reinforce the school's educational message that smoking is harmful. The board is not pressuring teachers into being role models, but is fulfilling its responsibility to set curriculum and teaching messages.

In residential schools, where everyone shares the same ventilation system, it is essential to eliminate smoking in order to protect nonsmoking students and staff from the discomfort and health consequences of tobacco smoke. Prevention of fires is another reason residences should be smokefree.

There should be no areas at schools, including outdoors, where smoking is permitted. Public health recommendations regarding addictive substances vary for different drugs. The recommendations for alcohol use are that, if people drink, they should wait until adulthood, drink in moderation, and behave responsibly about drinking and driving. In the case of cigarettes, the health recommendation is not to smoke at all because, even in small amounts, tobacco smoke is hazardous to the health of smokers and nonsmokers. Given those recommendations, offering cocktail lounges to teachers might be less inappropriate than smoking areas.

Keeping bathrooms smokefree is important for the health and comfort of the majority of students who do not smoke; they need access to toilet facilities. This is not just a matter of comfort. For asthmatic children, ETS exposure can be life-threatening. And asthma is on the rise among children. Maintaining smokefree bathrooms also helps to reduce smoking by students. Some schools, in an effort to avoid requiring teachers to be monitors of smoking, have equipped bathrooms with highly sensitive smoke alarms, wired to a signal in an administrator's office.

Some schools have required students caught smoking to take a stop-smoking course. Students "sentenced" to a cessation program have been resistant and program facilitators have objected. But other schools have discovered that some students "get caught" smoking because they want help to end their smoking addiction but do not want to admit that to friends. Eighty percent of children who smoke want to quit but only 1.2 percent succeed, according to a nationwide report released by the Robert Wood Johnson Foundation in February 1995.

Adult cessation programs are not designed for children. Cessation programs addressing the emotional issues and smoking behaviors of young smokers have been developed by the American Lung Association and other organizations.

Schools should not allow the sale of cigarettes on school property. Even colleges and training schools with adult students frequently have minors present. Allowing cigarette sales encourages violations of laws prohibiting sales to minors and laws prohibiting purchase and use of tobacco by minors.

(Please see the Public Places and Outdoors sections for more information.)

PUBLIC PLACES: SHOPPING AND OFFICE MALLS; ENTERTAINMENT AND SPORTS FACILITIES; TRAVEL , CRUISES, COUNTRY CLUBS, BARS, CLUBS, CASINOS

Why

In most public places, most people are nonsmokers. Cigarette litter is a problem in places where people come and go. Cigarette-caused fires are a concern where large numbers of people are present. In many public places, people stay only a short time so the inconvenience of not being able to smoke is minimal. These are all reasons proprietors and managers of public places have instituted smokefree policies.

Another reason is to keep up with the competition. Shopping and office malls, entertainment and sports facilities, the travel industry, even traditionally smokefilled places like bars and bingo parlors are becoming smokefree.

Shopping and Office Malls

Smokefree malls and office complexes are becoming the norm. In late 1994, half of the nation's 1,800 enclosed regional malls were estimated to be smokefree by Mark Schoifet, spokesperson for the 25,000-member International Council of Shopping Centers. All 70 malls operated by the Maryland-based Rouse Co. are smokefree. More than half of the Philadelphia-area malls are smokefree, as are many malls in Michigan.

Most New Jersey malls went smokefree in 1993-94. The Mall at Short Hills is New Jersey's largest, with Neiman-Marcus and Saks Fifth Avenue among its five department stores. General Manager Craig Perry reported, about the inauguration of its smokefree policy in April 1994, "The reaction has been phenomenal. About 95 percent of the complaints we received about this property used to come from people who wanted this to be a no smoking facility."

Even in the heart of tobacco-growing country, malls are adhering to, even touting, their smokefree policies. Mall St. Matthews in Louisville, with more than 50 stores, adopted a smokefree policy in late 1994. Despite organized protests from the National Smokers Alliance, the mall management maintained its policy. Several northern Virginia malls, including Tysons Corner and Potomac Mills, have prominently featured their smokefree environments in their advertising.

Carnegie Center Associates manages three million square feet of office space in New Jersey, mostly in one to five-story office parks. Bernie McNamee, Director of Property Management, estimates 10,000 to 15,000 people are housed in its buildings, which have been smokefree indoors, including cafeterias, since 1994. Carnegie Center Associates also defines where smoking is allowed outdoors (in designated areas near loading docks) so people don't have to enter buildings through a cloud of smoke. In New York City, the Mendik Company, which owns and manages 12-million square feet of commercial office space, was among the supporters that urged the City Council to prohibit all smoking in any part of a commercial office building.

Entertainment and Sports Facilities

Entertainment and sports facilities are well along the way to smokefree status. The Shubert Organization, which owns more than 20 theaters, the sites for live performances in Boston, New York, Philadelphia, Washington, DC, and Los Angeles, has made all its theaters smokefree. The Universal Amphitheater in Universal City, California is smokefree, as well as the Great Western Forum, the 18,000-seat concert and sports facility in Inglewood. Two famous outdoor amphitheaters, the Greek, in Los Angeles, and the Hollywood Bowl, are smokefree in their seating areas.

Dozens of professional sports stadiums are smokefree including domed stadiums in Atlanta, Houston, Montreal, Minneapolis, Seattle, and Toronto, and outdoor stadiums in Philadelphia, San Diego, Baltimore, Detroit, and Oakland. All major league ballparks offer smokefree seating, except for the Milwaukee Brewers. More than 50 college football facilities are smokefree, including Stanford, Penn State, Ohio State, Texas A & M, Virginia Tech, Kentucky, Louisiana State University, and West Point. In August 1994, the NCAA banned all tobacco use during all practices and games. The 1996 summer Olympics in Atlanta were smokefree.

The New Jersey Sports and Exposition Authority, which manages the Meadowlands race track and arena and Giants Stadium, is making all its facilities smokefree. Speaking of its decision, Robert E. Mulcaby III, President and CEO, said, "We pride ourselves at the Sports Authority on being responsive to the needs of the sports and entertainment marketplace and on being fan-friendly." Michael Rowe, Executive Vice President, said, "We listened to the voices of our fans."

Travel, Cruises, Country Clubs

Federico Pena, the us Secretary of Transportation, reported in summer 1996 that 80 percent of flights between the United States and other countries were smokefree. Airlines are also responding to the International Civil Aviation Organization, which passed a resolution in 1992 asking all member States to have smokefree international flights by 1996. (Almost all United States domestic flights are required by Federal law to be smokefree.)

Delta Airlines was the first United States carrier to make all flights smokefree, worldwide (January 1, 1995). In full-page advertisements celebrating the first anniversary of its policy, Delta's headline read, "With all our flights smokefree, flying Delta can be habit-forming." Apparently, other airlines agree. Northwest, the first United States carrier to voluntarily make all domestic flights smokefree, has joined

Delta, with all flights worldwide smokefree, as have Virgin, U.S.Air, Air Canada, and Air New Zealand.

Airline passengers can expect to land at smokefree airports. A July 1994 survey by the American Cancer Society, American Heart Association, and American Lung Association found that most public areas in most United States airports were smokefree. The study reported that 83 percent of airports reported their concourses and walkways were smokefree, up from 54 percent in 1992. Eight large airports, including Los Angeles, Chicago, and Dallas/Fort Worth, were totally smokefree at the time of that study. In January 1996, a new study by the three organizations found that one-third of 59 airports responding to the survey were totally smokefree, a 22 percent increase since the earlier survey. One reason airports were eliminating smoking areas was cost. Air exchanges of 60 cubic feet per minute in smoking areas (compared to 15 cubic feet per minute in nonsmoking areas) are expensive.

Other carriers are going smokefree, too. Amtrak eliminated smoking on most of its trains in 1993. Greyhound, the only bus company with nationwide service, eliminated smoking on buses several years ago, in response to Department of Transportation regulations, and made its offices and some terminals smokefree. Avis, Budget, Hertz, National, and Thrifty all offer smokefree rental cars; National will guarantee a smokefree car for persons with respiratory disability. Hertz sets aside 80 percent of its fleet as nonsmoking. Avis began offering nonsmoking cars several years ago at the urging of its owner-employees.

Even in the more leisurely travel/entertainment world of cruise lines, smokefree is becoming the norm. In 1992, Majesty Cruise Lines advertised as the only cruise line with smokefree restaurants. But since then, American Hawaii, Carnival, Cebu, and Princess, among others, have instituted smokefree dining rooms, and Princess has also made its main show lounge smokefree. Publicity for these policies has come from an unlikely source—Benson & Hedges cigarettes. Its April 1, 1996 ad in *Newsweek*, in its series showing people smoking on window ledges, etc., showed passengers smoking in lifeboats, with copy announcing that the dining rooms on most cruise ships are smokefree.

Cruise lines also offer nonsmoking guest rooms, as do 86 percent of hotels surveyed by the American Hotel and Motel Association. The Texas Hotel and Motel Association sees a continuing increase in nonsmoking accommodations and Executive Vice President Don Hansen reports that 50 to 60 percent of Texas' quarter-million hotel rooms are smokefree. The Hilton hotels find demand for nonsmoking rooms ranges from 50 to 80 percent. Crowne Plaza, Embassy Suites, Hampton Inns, and Homewood Suites have set a minimum of 75 percent of their rooms as nonsmoking.

Some hotels do more. In the early 1980's, Lyndon Sanders opened the Non-Smokers' Inn, Dallas, then widely regarded as the first totally smokefree hotel. Others have followed. The Southwest Inn, an "authentic Santa Fe style country inn" in Sedona, opened in September 1994 with a nonsmoking policy. Bed and breakfasts and historic hotels are usually smokefree. One New Jersey bed and breakfast association requires members to be smokefree.

Failure to provide sufficient smokefree accommodations is a problem not only for the hospitality industry, but for the communities where it does business. Miami lost out on a convention of the National Conference of Bankruptcy Judges when its local hoteliers did not guarantee that at least 50 percent, and preferably 75 percent, of the 1,500 rooms needed by the organization would be nonsmoking. The judges decided, early in 1996, to take their \$1.4 million in business to San Diego instead.

Country clubs are establishing nonsmoking policies. Marsh Landing Country Club in Ponte Vedra Beach, Florida is Jacksonville's most expensive non-equity country club and golf course (membership is \$20,000 plus as much as \$2,500 annual dues). The club made all indoor facilities smokefree in June 1994. Assistant manager Sally Hall, interviewed a year later about their decision, listed among their reasons responding to the trend in other organizations and public places plus reducing the problem of cigarette burns in upholstery. Hall reported the new policy produced "fewer objections than we might have expected." One couple that objected to the policy is now dealing with another tobacco-related problem: The wife, a smoker, is in chemotherapy because she has cancer.

Bars, Clubs, Casinos

In early 1992, Alan Truscott, the bridge columnist of the New York Times, reported that nearly all American bridge clubs and tournaments ban smoking in playing areas. In New Jersey, the Laughing Bean comedy club and coffee house in Red Bank is smokefree as is The Common Ground Cafe, a coffee house with live entertainment, in Summit. There's smokefree bingo at St. Mary's in Nutley and Temple Shaari Emeth in Manalapan. The Sands casino in Atlantic City highlights its entirely smokefree second level in its advertising.

There are dozens of smokefree bowling centers, billiard parlors, coffee houses with live music, comedy clubs, and dance halls in southern California, listed in the Breathing Easy Entertainment Guide published by the American Lung Association of Los Angeles County. In Washington Township, New Jersey, Oakwood Lanes initiated smokefree Thursday nights in 1993. "Bowling is an old sport, but that doesn't mean we can't think modern," said owner Robert Plenge.

Bars and taverns are going smokefree. Petrocks's Bar and Grille, next to Petrock's Liquor Store, looks like many bars, with high stools around the counter, lots of dark wood, and display advertisements for various drinks. It's easy to see the ads because the air is smokefree. The bar and restaurant, in rural Belle Mead, New Jersey, grew naturally from the family liquor store when Mrs. Petrock began serving sandwiches, and it's been smokefree for years.

In Washington, several dozen bars and taverns in Tacoma, Port Townsend, Olympia, Seattle, Yakima, Milton, and elsewhere are smokefree. One tavern owner reported a 40 percent increase in business when he made his bar smokefree. When San Francisco's first smokefree bar opened in 1992, the owner advertised for bartenders, emphasizing that it would be a smokefree environment. There were more than 600 applicants for jobs.

More than 100 local jurisdictions in eight States require bars to be smokefree. Ordinances apply to free-standing bars and/or bars attached to restaurants. California passed a statewide ban on smoking in free-standing bars, effective January 1998. Bars are finding that mandated smokefree policies work well. One of the first cities to enact a smokefree bar ordinance was San Luis Obispo, California. The law "had no measurable impact on bar sales as measured by sales tax revenues" according to the Taylor Consulting Group, an independent consulting organization which issued its report in January 1993.

How

The experiences of these diverse public places demonstrate that virtually any public place can implement a smokefree policy. It's important to give advance notice, provide adequate information, and represent the policy as a plus not a minus. Make it clear that it's smoking that's not allowed; people who smoke are welcome. Virgin Atlantic's ad in the New York Times, April 5, 1995, had only two sentences of text on a full page of white space: "Starting May 1st, all Virgin Atlantic flights between the U.S. and London will be smokefree. it's probably the most sincere way to tell our smoking passengers that we'd like to keep them around."

(Please see the Restaurants and Outdoor Settings sections and the Smokefree Workplaces and Public Places lists for more information.)

RESTAURANTS

Why

Smokefree restaurants benefit restaurant owners, customers, employees, and the children of America.

Keeping Up with the Competition

Thousands of individually owned restaurants throughout the United States have instituted smokefree policies. Smokefree dining directories list 500 smokefree individual restaurants in New Jersey, 300 smokefree individual and chain restaurants in northern Virginia, 1,500 individual and chain in Michigan, 700 in Wisconsin, 750 in Minnesota, 1,600 individual and chain in Colorado, and 1,600 in Washington. A national directory of smokefree restaurants and restaurants with nonsmoking sections is available on the Internet (<http://www.smokescreen.org>).

Tens of thousands of restaurants in large or national chains are smokefree, according to the Council of Chain Restaurants. The following chains are smokefree in all restaurants: Au Bon Pain, Bertucci's Brick Oven Pizza, Boston Market, California Pizza Kitchen, Chuck-E-Cheese, Dunkin' Donuts, Starbucks, and Taco Bell. The following chains are smokefree in corporate-owned restaurants and recommend smokefree policies for franchised restaurants: Arby's, Burger King, Dairy Queen, Jack in the Box, Kenny Roger's Roasters, McDonald's, Showbiz Pizza, and TCBY.

The Dunkin' Donuts policy, mandatory for all 3,000 company operated and franchised stores in the United States, plus company-operated stores outside the country, was unanimously approved by the franchisee-elected leadership in January 1995. The chain, largest of its kind in the world, implemented the policy June 1, 1995. McDonald's is the nation's largest fast-food chain, with more than 12,000 restaurants. Company owned restaurants constitute about 15 percent of its restaurants; many franchisees also have adopted smokefree policies.

Smokefree Dining Is Popular

Three out of four people would actively seek out and patronize smokefree restaurants, reported Bob Harrington of the National Restaurant Association (at the December 1993 National Environmental Tobacco Smoke conference, Washington, DC.). Other organizations that monitor restaurant patrons find similar results.

The Zagat Survey (which publishes bestselling guides to restaurants, hotels, and resorts around the country, based on polls of regular restaurant goers and frequent travelers) reports that an overwhelming majority of customers believe smoking in restaurants should be totally banned.

In polls of 18,223 regular restaurant patrons and frequent travelers, conducted in the summer of 1994, people were asked, "Should all smoking be banned in restaurants?" In New York, nearly 70 percent said yes; in San Francisco, 79 percent said yes; and in Los Angeles, 81 percent said yes.

When San Diego was considering a smokefree restaurant ordinance, it undertook a study of the effect of the proposed ordinance on its convention business. A survey of 40 groups that came to San Diego for conventions in 1991-92 found that 38 of the 40, representing almost 170,000 convention attendees, would schedule future conventions in San Diego if the city adopted the ordinance. (One group said they wouldn't return: the tobacco and candy industry group.)

Prior to the passage of the smokefree ordinance in New York City (January 1995), a Gallup poll found that 63 percent of those polled would support a law eliminating smoke from restaurants, public places, and workplaces. The same poll found that if restaurants were smokefree, 87 percent of those polled would eat in restaurants more often or as frequently and 75 percent of those polled said that they eat out once a month to once a week or more. While 12 percent of the people who were polled said they never eat out, 20 percent of that group said they would start eating out if restaurants were smokefree.

(Please see the Public Opinion section for more information on polls, which show support from 70 to 98 percent for smokefree restaurants.)

Laughing All the Way to the Bank

With this level of public support, smokefree restaurants certainly needn't worry about loss of business. As thousands of proprietors have discovered, smokefree dining is good for business. "Laughing all the way to the bank" is how one New Jersey restaurateur described his experience with smokefree dining. He's in good company; New Jersey restaurants are becoming smokefree at the rate of two a week. Scientific evaluations have verified the business benefits, too:

In Marin, San Mateo, Ventura, and Alameda counties in California, 90 to 95 percent of all restaurants that had voluntarily gone smokefree "said that their business either improved or didn't change," according to a study by the California Health Department. The study tracked restaurant sales from 1991 to 1993 in a cross section of socio-economic areas in 36 cities. No restaurant in the study ever went back to allowing smoking after voluntarily going smokefree.

An earlier study predicted that result. In 1992, the University of California conducted a random-sample survey of 11,905 State residents regarding their smoking behaviors and attitudes. Its conclusion was that "There should be a net gain in restaurant business if smoking is banned." It went on to say, "Our results suggest that smokefree restaurants will represent a major business opportunity causing little or no inconvenience to 98 percent of current customers."

Restaurants required by law to be smokefree don't lose sales. A study of every community throughout the country with legislation requiring smokefree restaurants, comparing results with an equal number of similar communities without legislation, concluded that "smokefree restaurant ordinances do not adversely affect restaurant sales." (*American Journal of Public Health*, July 1994). These results were consistent for all geographical areas, and whether the communities were urban or rural, large or small, wealthy or not. Some of the communities studied were in large metropolitan areas like Los Angeles, where patrons could easily go to other restaurants in neighboring areas which did not require smokefree restaurants.

Other studies replicated those findings:

- Claremont Graduate School compared 19 California cities with smokefree restaurant ordinances to 87 cities with no ordinances and found that regulated restaurants did not lose business, and restaurants in surrounding cities did not gain business.

- The Texas Department of Health examined the economic effect of a smokefree ordinance on the seven restaurants in West Lake Hills in 1992 and 1993. Results showed a slight increase in revenue.

- In Aspen, where smokefree restaurants have been required by law since the mid-1980's, total retail sales, including restaurant sales, increased after the city's

smokefree ordinance went into effect, according to studies published by the Aspen Resort Association.

- Flagstaff, Arizona's smokefree restaurant ordinance had no negative impact on sales as measured by sales tax data, and, 15 months after the ordinance became effective, 94 percent of restaurant owners reported the ordinance was "easy" or "very easy" to enforce. (John Sciacca et al., "Prohibiting Smoking In Restaurants: Effects on Restaurant Sales")

- Researchers at Cornell University found that smokefree restaurants attract more business. Their study, "Should New York City Restaurants Lighten Up?", investigated the impact of the New York City ordinance requiring smokefree dining areas in restaurants. They found that nonsmokers increased their dining in restaurants because of the smokefree law and more than made up for any business lost among smokers, since nonsmokers account for almost 2.5 times more overall revenue than smokers.

- Researchers at Boston University, studying the restaurant smoking ban in Brookline, Massachusetts, reported in November 1995 that the new law had not hurt business, even in restaurants that serve alcoholic beverages. The study, for the Massachusetts Department of Health, showed Brookline's restaurant income rose while other Massachusetts towns lost business, prompting the Boston Globe to suggest that Brookline's restaurants ". . . may have gotten a boost from out-of-town diners dropping in to savor not just food, but smokefree air, too." (Note: The tobacco industry has circulated misinformation about smokefree restaurants and patronage. Please see The Tobacco Industry section for more information.)

Cutting the Costs of Doing Business

Maintenance costs and business losses are reduced in smokefree restaurants. Furnishings last longer because there are no more cigarette and cigar burns in tablecloths, tables, or carpets. Ceilings and walls are not yellowed by tobacco smoke; repainting is needed less frequently. Ashtrays never have to be bought or cleaned. Draperies, carpets, and air conditioning or heating filters require less frequent cleaning. There is less employee sick leave caused by secondhand smoke.

With only one section, reservations and seating are simplified. Tables in the smoking section aren't empty while patrons wait for tables in the nonsmoking section. Tables turn over faster because patrons don't linger, smoking cigarettes. Totally smokefree restaurants eliminate disputes among customers about smoking.

Some smokefree restaurants have negotiated lower fire insurance rates from their insurance companies. The National Fire Protection Association reports that smoking caused between 4 and 5 percent of all fires in restaurants from 1986 to 1993. Sometimes those statistics strike home. Michael and Marybeth Peters created the Brass Rail, a French restaurant that was a leader in the restaurant renaissance in Hoboken, New Jersey. The Peters family lived above the restaurant. One night a fire caused by a cigarette destroyed their restaurant and home. That's one reason their new restaurant and wine bar, Pierre's, in Harding Township, New Jersey, is smokefree.

Smokefree Restaurants Are More Pleasant

Secondhand smoke interferes with the taste of food and permeates the clothes and hair of customers. Chez Panisse, the nationally famous restaurant in Berkeley, eliminated smoking in its main dining room in 1986, and in its cafe in 1990. "Basically, we think smoking is a detriment. We want patrons to smell the fabulous aroma emanating from the food, not cigarettes," said Gayle Pirie, assistant to Alice Waters, the owner and cookbook author (*New York Times*, June 30, 1996). Restaurant proprietors who work hard to provide fine food and a pleasant atmosphere are recognizing they can't overlook tobacco smoke, which offends many customers with every breath.

Legal Requirements

Restaurants in at least five States (California, Maryland, Utah, Vermont, and Washington) and 200 communities, including New York City, are required to be smokefree by legislation and regulations enacted over the last several years. More than 100 local ordinances also require bars to be smokefree; some ordinances apply to bars attached to restaurants, some to freestanding bars. California has a State law requiring bars to be smokefree, effective January 1998. (Please see the Public Places section for more information on smokefree bars.)

Restaurants are places of public accommodation, with responsibilities to meet health and safety standards. Dishwashing water must be heated to a specified temperature, eggs must be refrigerated, and employees are required to wash their hands after using the toilet. It follows that the air should be free of ETS, an identified and unnecessary toxin.

Restaurants are workplaces. Restaurant and bar workers are exposed to as much as 1.6 to 6.1 times more smoke than office workers, according to a study in the *Journal of the American Medical Association*, July 28, 1993. Wait staff and bartenders have more lung cancer and heart disease than other employees because of this exposure. A study in Massachusetts, with data collected from 1982 to 1990, found lung cancer rates were 50 percent higher among restaurant workers than employees in other occupations (Daniel R. Brooks, M.P.H., Bureau of Health Statistics, Massachusetts Department of Public Health). Proprietors are recognizing their responsibility. As Vincent Sardi, of the legendary New York City restaurant said, "Sardi's employs approximately 130 people. It is not fair to expose them to a smoke-filled environment, endangering their health."

Smokefree restaurants protect themselves from legal liability. The National Restaurant Association's legal counsel has advised members that they can be held responsible for workers' compensation claims made by employees who develop lung cancer or other ailments attributed to secondhand smoke. In the first such case, Avtar Ubbi, a waiter, sued his employer for an ETS-induced heart attack and was awarded almost \$100,000. Under the Americans with Disabilities Act, customers as well as employees can bring actions. People with disabilities—including asthma, which is widespread and increasing—who are sensitive to secondhand smoke, can sue because tobacco smoke limits their access.

Smokers Accept Smokefree Policies

Patrons who smoke know that secondhand smoke is a health hazard and an annoyance. They're accustomed to Smokefree policies at work, in transportation, in malls, and other public places. They often socialize and dine with nonsmokers and join their friends in Smokefree areas. Some smokers—29 percent according to a 1987 Gallup Poll—prefer Smokefree seating in restaurants. Smokers eat in restaurants less frequently than nonsmokers. (This may be a reflection of smokers' lower average economic status. Smoking is continually decreasing; fewer than one-fourth of Americans now smoke. Proprietors realize that it doesn't make sense to cater to a dwindling minority, especially one with less income and lower patronage, when few of them insist on smoking-permitted dining.)

For the Youngest Customers

Restaurants are the most frequented public places in America. The average American visits a restaurant 3.5 times a week—every other day. Many of these patrons are young visitors, who are especially sensitive to ETS. Smokefree restaurants protect their health.

Youngsters learn many important lessons by example. Smokefree restaurants can be powerful reinforcers for the Smokefree messages they hear in school.

How

Smokefree policies offer positive publicity for restaurants, especially for the first Smokefree restaurants in an area. Decision makers who act, before laws or regulations require restaurants to be smokefree, gain a marketing advantage and can attract new customers by emphasizing smokefree dining in advertising. There are smokefree dining directories in a number of States. To be listed in them and on the Internet, without charge, call Smokescreen Consulting in Washington, DC. at 202 NO SMOKE (or visit <http://www.smokescreen.org>).

Patrons making reservations can be reminded that a smokefree environment is provided to enhance their dining experience and to protect the health of all, including employees. Receptacles for cigarette butts can be tactfully placed near the entrance of the restaurant, and if desired, an outdoor smoking area can be designated.

LANDLORDS

Why

Landlords and condominium associations have a responsibility to provide safe and healthful facilities and to ensure cooperation with standards to protect occupants. They also have authority to set standards for how their buildings are to be used. (Please see the Public Places and Outdoors sections for more information on smokefree policies set by building owners for office and shopping malls, and for smokefree policies in the hospitality industry.)

Legislation, Regulation

Throughout the Nation, many laws and regulations establish standards to protect the environment, standards which can be applied to dwellings. In addition, States and municipalities have enacted building codes to provide for the health and safety of building occupants. For instance, the California Health and Safety Code says, "No

person shall discharge from any source whatsoever such quantity of air contaminants or other material which cause injury, detriment, nuisance . . . or which endanger the comfort, repose, health or safety of any persons or the public." Many California jurisdictions have adopted Section 1206(c) of the State Mechanical Code which requires that "return air from one dwelling unit shall not be discharged into another dwelling unit through the cooling system."

New Jersey's regulations for maintenance of hotels and multiple dwellings (NJAC 5:10-6.2 mandate premises "free of hazards to the health or safety of occupants and other persons in or near the premises" and require owners to eliminate or abate odors "arising out of the use or occupancy of the premises which shall constitute a nuisance that is harmful or potentially harmful to the health and well-being of persons of ordinary sensitivity occupying or using the premises." As scientific evidence about the harmful effects of ETS accumulates, State and local regulations and laws like these are being interpreted to include protection from ETS.

Some jurisdictions have passed legislation specifically addressing tobacco smoke in multiple-occupancy dwellings. For example, the city of Long Beach, California, requires that enclosed public areas of apartment buildings be smokefree.

The Americans with Disabilities Act, Federal legislation protecting persons with disabilities from discrimination in workplaces and public places, can be used by people with asthma and other smokesensitive tenants and members of the public to require landlords to make publicaccess areas of their building smokefree. The Federal Fair Housing Act of 1988 also gives tenants with disabilities an avenue of relief.

In 1994, a tenant with asthma, in a privately owned mobile home park in San Leandro, California was able to require management to prohibit smoking in all areas of the clubhouse in the complex, which was shared by the residents of more than 350 mobile homes. In the agreement, which was reached after the tenant asked the Department of Housing and Urban Development to file a Federal discrimination lawsuit on her behalf, the park owners also agreed to enforce the policy, to post signs and notices of the policy, to inform park residents about the policy in writing, to reissue the park's residency guidelines to include the new policy, and to arrange for park management to inspect the clubhouse during the evening, when regular staff was not on duty.

Health officers can intervene to protect occupants from health hazards and nuisances created by neighbors and landlords, including ragweed growing on nearby land or disagreeable odors from garbage. As the Chief of the California Division of Occupational Safety and Health, John Howard, pointed out when testifying for smokefree legislation, ". . . tobacco smoke travels from its point of generation in a building to all other areas of the building. It has been shown to move through light fixtures, through ceiling crawl spaces, and into and out of doorways." Some health officers are now acting to control tobacco smoke generated by neighbors. The New Jersey Commission on Smoking OR Health has recommended that the State Department of Health promulgate standards for the maximum amount of tobacco smoke pollution allowed to enter one dwelling from another. As complaints increase, there will be more attention to this problem.

Litigation

A body of case law is emerging that holds landlords responsible for exposing tenants to ETS. Tenants have sued on the basis of nuisance, breach of statutory duty to keep the premises habitable, breach of the common law covenant of peaceful enjoyment, negligence, harassment, battery, and intentional infliction of emotional distress.

In one of the first cases, in 1991, a Massachusetts woman sued her landlord because she was constantly exposed to the secondhand smoke of another tenant. She suffered asthma attacks, labored breathing, wheezing, prolonged coughing, clogged sinuses, and frequent vomiting. That case was settled for an undisclosed amount of money in 1992 (*Donath v. Dadah*).

A year later, a landlord in Oregon was sued by a tenant who was affected by cigarette smoke from another tenant who lived directly below. The tenant alleged that the landlord had breached his statutory duty to keep the premises habitable and the covenant of peaceful enjoyment which the common law implies in every rental agreement. A six-person jury unanimously found a breach of habitability, reduced the tenant's rent by 50 percent, and awarded her payment to cover her doctor's bills (*Fox Point Apts. v. Kippes*).

The Pentony case in New Jersey, in which a couple sued because of smoke entering their condo unit, was the subject of three stories in the *New York Times*, numerous other reports around the Nation, and a story in the *National Law Journal* in 1994. A judge ordered the apartment complex directors to resolve the problem (the terms of the settlement are confidential).

In 1996, Roy Platt sued his downstairs neighbor and his condo association because of cigarette smoke that entered his open windows from the unit below. In that case, filed in the Los Angeles Superior Court in June, Platt contended that he was not overly sensitive to smoke, but that the amount of smoke wafting into his home had, at times, made him sick to the point of vomiting. "I have friends who smoke and they find it difficult to be here," he said. (*Los Angeles Daily Journal*, June 28, 1996, and *Los Angeles Times*, July 5, 1996)

Injunctive relief from ETS may be available to tenants for only the cost of their time, energy, and several hundred dollars. In April 1996, the Superior Court in Long Beach, California issued a three-year restraining order to prohibit smoking by a condo owner in his garage (which he also used as an office). The ban was sought by other condo owners, Richard and Marcia-Luna Layon, because smoke was entering their unit from the garage. (*Layon et. al. vs. Jolley et. al.*) The Layons brought the action themselves, without an attorney.

Legal redress was obtained by another person lacking counsel. In 1994, a Massachusetts woman suffering from pulmonary fibrosis won a temporary injunction preventing her landlord from renting the units below her to smokers (*Snow v. Gilbert*).

(In a related development, there are now a number of cases in which people have been ordered not to smoke in their homes around children. Courts in at least 16 States have rendered those decisions in response to the urging of child welfare agencies seeking to protect smoke-sensitive children and the request of parents in child custody cases.)

Benefits of a Smokefree Policy

Other reasons why landlords create smokefree policies:

- Most tenants don't smoke and they appreciate a smokefree policy.
- A landlord-mandated policy relieves tenants from the burden of trying to persuade others not to pollute the common environment.
- Some landlords live in their rental complexes, especially in duplexes and other relatively small buildings, and want to protect themselves from ETS.
- Maintenance costs and litter are reduced. The offensive odor of secondhand smoke, which can linger in spite of cleaning and painting, is eliminated.
- Fire danger is lessened.
- Property insurance costs can be reduced.
- Landlords are experienced property owners. They notice there is less property damage and there seem to be fewer problems, like fights, in smokefree buildings. (This may be a reflection of the fact that almost all alcoholics and illegal drug users are smokers and a smokefree policy tends to sift out these people whose personal problems often spill over onto others.)

Landlords Are Free to Choose

Landlords are free to refuse to allow smoking, just as they are free to refuse to rent to people with pets. It's a matter of preservation of property.

The law is clear that there is no legal or constitutional right to smoke, even in one's dwelling, according to John Banzhaf, professor of law at George Washington University and director of Action on Smoking and Health. Frank J. Kelley, the Lansing, Michigan Attorney General has said that landlords may refuse to rent to smokers and they may restrict smokers to certain buildings within their complexes without violating Federal and State antidiscrimination laws (*Detroit News*, May 5, 1992). Interviewed in the same report, even the tobacco industry agreed. Tom Lauria, a spokesman for the Tobacco Institute, acknowledged that private business owners have the right to determine what is best for their property.

Landlords are taking action. In Spokane, Washington, Don Wallace, who owns a number of residential units, has enforced a smokefree rule for 20 years. The newly launched Smokefree Apartment House Registry lists owners of multiple-unit residential housing in southern California with smokefree policies. Information about the registry is available from S.A.F.E. (Smokefree Air for Everyone), Newbury Park, California, phone: 805 499-8921.

One of the owners listed in the registry, Shirley Weber of South Pasadena, owns 20 units which have been smokefree since 1980. She initiated the policy after several years of renting during which she had problems with smoking, including burned carpets. But she was worried about more than minor damage. She says, "The reason that I have kept my buildings smokefree is that smoking is a major cause of fire fatalities."

Condominium associations can set similar policies and can use standard clauses already existing in condo contracts to control ETS problems. Public building owners can act, too. In Fort Pierce, Florida, the housing authority voted unanimously to prevent new tenants from smoking in the community's 850 units. When they sign

their lease, the new tenants must also sign an affidavit pledging not to smoke in their apartments (*New York Times*, May 5, 1996).

How

Communicating the policy is crucial in enforcing a smokefree policy by building owners or condominium associations. Signs should be posted on entrances, in lobbies, in elevators, and on each floor. Cigarette receptacles should be removed. If smoking is to be allowed outdoors, an area should be designated, away from entrances, windows, and air-intake vents.

All new contracts should include information on the policy, and old contracts should be renegotiated to include the new rules. The contract or lease should specify that the property is "to be occupied as a smokefree residence." It should say that the tenant will "prohibit smoking by his/her household members or guests while on the premises," that "it is the tenant's responsibility to inform his/her guests of the smokefree portion of this contract/lease," and that "the tenant agrees to vacate the premises within 3 months if the agreement to be smokefree is violated."

Lower insurance rates can be negotiated for fire, property, or homeowner's packages. Reduced fees may be negotiated with maintenance contractors. Advertisements should say the buildings and premises are smokefree, not that only non-smokers may rent/buy condos.

Recognize, as owner Shirley Weber says, "It is true that the more particular you are about your prospective tenants, the longer it may take to rent a unit," but she says, "I feel very good about keeping my buildings smokefree."

ADDICTION TREATMENT PROGRAMS

Why

In response to external and internal pressures, the addiction treatment community is beginning to eliminate ETS in treatment and prevention programs. In 1992, the Joint Commission on Accreditation of Healthcare Organizations issued regulations requiring accredited institutions to severely limit smoking. In 1995, the New Jersey State Department of Health announced a requirement that all State-funded addiction treatment programs deliver their services in smokefree environments. Requirements like these foster and reflect reexamination of tobacco within the treatment community. That reexamination goes beyond ETS issues and looks at other nicotine addiction issues.

Signs of that rethinking: Several years ago, the Smokefree Coalition 2000 in Minnesota helped programs to develop smokefree policies and urged them to offer nicotine cessation. In Chicago, a number of programs are working together to address nicotine issues. In California, health officials have offered workshops about nicotine issues for addiction treatment programs. In New Jersey, the New Jersey Department of Health and Senior Services and the Robert Wood Johnson Foundation are funding a consultation program, Addressing Tobacco in the Treatment and Prevention of Other Addictions. In Massachusetts, since July 1, 1996, all State-funded substance abuse programs must have tobacco-free indoor facilities except that acute care facilities may allow clients to smoke in separately ventilated, separately enclosed rooms.

Frederick County, Maryland no longer allows addiction counselors to smoke on their breaks. Peter Charuhas, director of substance abuse services for the county, has said that staff shouldn't exhibit their own nicotine dependence at work. Charuhas had previously defended staff smoking "privileges" but changed his mind after the cancer death of a staff member (*Washington Post*, July 19, 1996).

As these examples illustrate, for alcohol and drug treatment programs the issue goes beyond protecting patients, families, and staff from ETS. Addressing nicotine dependence of staff and patients is also necessary. They cite many reasons:

First, while smokefree programs protect everyone, smokers as well as non-smokers, from ETS, smokefree policies also help former smokers remain nonsmokers and avoid encouraging the initiation of smoking by people who have never smoked. (Sadly, treatment centers sometimes send patients home abstinent and clean but with a new addiction, tobacco.) Many programs have adolescent patients and smokefree facilities support compliance with laws against furnishing tobacco to minors and use of tobacco by minors.

Creating a smokefree environment is part of establishing an environment which fosters consistency in the treatment of all addictions. Not addressing nicotine dependence gives a false message that tobacco is not a "real drug" when tobacco has been recognized as a mood-altering, highly addictive, psychoactive substance since 1980. Treatment programs also need to offer nicotine cessation for patients in order to fulfill their ethical and clinical responsibility to give patients help to recover from

all their addictions. Additionally, smoking can be a "holdout" drug and a cue for other drug use.

Patients in addiction treatment programs have extraordinarily high rates of nicotine use. More than 80 percent smoke, three times as many as in the general population. (Staff smoking prevalence may be as high as 60 percent.) This health problem needs treatment, as would any other pre-existing health problem. These patients tend to smoke more heavily than other smokers, so they have greater-than-average health risks from their smoking. But, like most smokers elsewhere, patients want help to end their nicotine addiction. Treatment facilities that become smokefree find that the desire of patients for nicotine withdrawal assistance increases.

Finally, programs that save people from other drugs don't want to lose them to tobacco-induced diseases. Yet a 10-year study at the Mayo Clinic Addiction Program found that alcoholics who smoke are more likely to be killed by their smoking than by their drinking. Among patients who had died, 50.9 percent died of tobacco-related causes while alcohol-related causes accounted for 34.1 percent of deaths.

One well known recovering alcoholic who died of emphysema, a result of his heavy smoking, was Bill W., the cofounder of Alcoholics Anonymous.

How

Addiction treatment programs need longer time for transition than other organizations, for a variety of reasons. One is that staff must be nicotine-free or at least free of evidence of nicotine dependence while on the job. Nicotine-dependent staff may be resistant to smokefree facilities. Allowing staff to smoke, even outdoors, compromises the nicotine-free message. And it poses other problems: As one New Jersey program director said, "Every time I want to find my staff, I have to look outside!"

Programs need to work with referral agencies in the community, to inform them of the smokefree policy and nicotine addiction treatment services. If all programs in one area work together, there will be no competitive advantage or disadvantage.

For a more complete discussion, please see "Following the Pioneers" in the *Journal of Substance Abuse Treatment*, Vol. 10 pp. 153-160, 1993. Much of the information presented here was taken from that report.

OUTDOOR SETTINGS

Why

As more attention is focused on tobacco problems, smoking outdoors is being re-examined. With the proliferation of smokefree air policies and laws indoors, smokers often congregate outdoors, especially at building entrances, where the smoke and the litter become problems. ETS can be a health hazard outdoors, especially for a child with asthma or a person with emphysema sitting among smokers in a ballpark with 70,000 fans in assigned seats. Secondhand smoke can be offensive outdoors.

Some organizations have made their grounds smokefree because they didn't want people to have to walk through a cloud of smoke to enter their buildings. Also, smoke outdoors sometimes becomes smoke indoors, entering buildings through entrances, windows, or air-intake vents. Smoking outdoors poses a fire threat. It can be a burn hazard, especially on beaches, at swimming pools, and in crowded places.

Cigarette butts, packages, and other tobacco-use debris are a source of litter, particularly in outdoor smoking areas or near entrances. The Center for Marine Conservation found cigarette butts to be the largest single source of beach trash, representing 17 percent of all trash, in its 1995 study in 33 States. Cigarette butts are routinely tossed on the ground almost everywhere outdoors; ashtrays are emptied in parking areas or dumped out the windows of moving cars.

Eliminating smoking outdoors helps educate children, by providing examples of more smokefree places. Smokefree outdoor places encourage health for all, instead of enabling addiction. Alcohol use is forbidden in many public places outdoors, at playgrounds, outdoor family concerts, and other events. People are required to clean up after their dogs outdoors. Now smoking prohibitions are joining those rules.

Many professional and amateur sports stadiums are smokefree, including almost all of the 28 major league baseball stadiums. Aloha Stadium, site of the University of Hawaii football games, the NFL Pro Bowl, Hawaii's professional soccer team, and numerous other events, is smokefree in its 50,000 seats. Skylands Park, the 4,000-seat stadium that is home to New Jersey's minor league baseball Cardinals, made its seating smokefree because smokers were leaving hundreds of cigarette butts all over the place, according to Robert Hilliard, president of the Skylands Park management (*New Jersey Herald*, August 3, 1995). He added, "This is a family place. The kids don't need to be around it."

Hyland Hills Ski Area of Bloomington, Minnesota is preparing to eliminate smoking outdoors. Mike Draeger, the manager, told the *New York Times* (January 25, 1996), "The whole reason for teaching kids about skiing is about the benefits of being outdoors. But right now, people are walking outdoors, and the deck is a cloud of smoke." Team Gilboa, a group of 300 5–19 year olds, uses Hyland Hills as its winter training site. Its summer training site is Timberline Lodge Ski Area in Oregon, which has already banned smoking in its lift areas. Timberline's director of skiing operations, Steve Kruse, reports that "complaints about smoking greatly outweighed any complaint about no smoking." Both resorts were also concerned about cigarette butts "all over the place."

The Pine Valley Golf Club, which has been ranked as the No. 1 golf course in the world by *Golf* magazine, banned smoking on the course. "We started posting 'No Smoking' on the board when the weather conditions became so dry that we were afraid of fire," said club manager Charles Raudenbush. Then the club noticed how much cleaner the course was (cigarette filters are not biodegradable) and that costs for picking up cigarette litter were reduced. So the policy became permanent at the New Jersey club where former Presidents Eisenhower and Ford plus other well known golfers, including Bob Hope, have played. The club's restaurant is also smokefree.

Sharon, Massachusetts has banned smoking at ballfields, parks, and public beaches. Honolulu City Council banned smoking on Hanauma Bay beach, Honolulu luo, and the Koko Crater Botanical Garden. Clayton, California bans smoking in parks and outdoor sports facilities, except golf courses. Bellaire, Texas, a suburb of Houston, is trying to live up to its name; it has banned smoking anywhere in the city's public park system. In New Jersey, Mt. Olive bans smoking in recreation areas; Clinton Township, Belleville, and Cedar Grove ban smoking in playgrounds; Sussex County bans smoking near government building entrances.

Davis and Palo Alto, California, forbid smoking within 20 feet of entrances of buildings open to the public and at public service areas like bus stops. New York City bans smoking outdoors at schools and children's institutions, open air theaters, seating and standing areas at commercial outdoor sports and recreational areas including racetracks, and outdoor waiting areas and service lines.

Two counties in tobacco-growing Maryland were considering banning smoking and chewing of tobacco in all publicly owned areas, according to a May 5, 1996 *New York Times* report. At least nine States require all public schools to be smokefree, indoors and outdoors. The Texas Board of Criminal Justice authorized a complete ban on tobacco use both indoors and outdoors, effective March 1995, for 100,000 inmates and 50,000 employees.

The Mayo Clinic does not allow smoking anywhere on its property, nor does Alina Lodge, a drug treatment program in New Jersey. Overlook Hospital, Summit, New Jersey, has a smokefree perimeter surrounding the hospital. Schering-Plough pharmaceutical company in Kenilworth, New Jersey, has made its grounds, including the parking lot, smokefree.

(Please see the Public Places section and the Smokefree Workplaces and Public Places lists for more information.)

How

Outdoor smokefree policies are the newest development in smokefree policies and, probably, the most likely to generate controversy, or at least surprise. When the Friendship Heights, Maryland Village Council passed its outdoor smoking ban in the autumn of 1996, the law had to be approved by the Montgomery County Council (because the Village is unincorporated). At press time, the Village Council did not have enough votes on the County Council to uphold the law. Council Member Patricia Forkan responded to critics who said they may have gone too far by saying, "It was probably equally strange when somebody suggested seat belts." (*Washington Post*, October 16, 1996)

Extra preparation and public information may be needed for outdoor smokefree policies. An abundance of signs is appropriate, both because the policy is innovative and the area to be covered by the policy may be large. Nonsmokers are more willing to speak up and inform violators when smokefree policies are well posted, according to several studies.

Neighbors need to be taken into consideration. Some schools that have made their grounds smokefree have found that neighbors become burdened by illicit smoking and cigarette debris.

Talk to other organizations like yours that have created smokefree outdoor policies (some are listed in the Appendices) for their suggestions and support.

Remember, as Council Member Forkan said, seat belts were considered strange at first. So were indoor smokefree policies. Outdoor smokefree policies and laws are working fine in many places.

