

EXAMINING CARCINOGENS IN TALC AND THE BEST METHODS FOR ASBESTOS DETECTION

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- * “Michigan AG Nessel Announces State’s \$3.2 Million Share of Multistate Settlement with Johnson & Johnson, Ethicon, Inc.,” press statement; submitted by Rep. Tlaib.

EXAMINING CARCINOGENS IN TALC AND THE BEST METHODS FOR ASBESTOS DETECTION

Tuesday, December 10, 2019

HOUSE OF REPRESENTATIVES,
COMMITTEE ON OVERSIGHT AND REFORM,
SUBCOMMITTEE ON ECONOMIC AND CONSUMER POLICY,
Washington, D.C.

The subcommittee met, pursuant to notice, at 1:13 p.m., in room 2154, Rayburn House Office Building, Hon. Raja Krishnamoorthi (chairman of the subcommittee) presiding.

Present: Representatives Krishnamoorthi, DeSaulnier, Pressley, Tlaib, Maloney (ex officio), Grothman, Comer, Miller, and Jordan (ex officio).

Mr. KRISHNAMOORTHI. The subcommittee will come to order.

Without objection, the chair is authorized to declare a recess of the committee at anytime. I now recognize myself for five minutes to give an opening statement.

On October 18, 2019, FDA announced that its independent lab, AMA Analytics, detected asbestos in Johnson & Johnson's talc-based baby powder. In response to FDA's announcement on October 18, J&J issued a limited recall of one lot of its talcum powder.

On November 15, 2019, I sent an invitation to Alex Gorsky, the CEO of Johnson & Johnson, requesting that he appear before our subcommittee to discuss the public health concerns regarding J&J's baby powder. I am disappointed that J&J has refused to comply with our request.

While Mr. Gorsky has not refrained from making multiple public statements on this topic, including authoring written statements and speaking with media outlets, he has now avoided voluntarily testifying under oath before Congress. In fact, the subcommittee's very first hearing earlier this year examined possible carcinogens in talc-based products. Johnson & Johnson objected to the hearing, complaining that it had not been invited to participate. In a media release subsequent to our hearing, Johnson & Johnson stated, and I quote, the subcommittee did not hear the preponderance of evidence that supports the safety of our product.

Before today's hearing, we gave Mr. Gorsky almost a full month's notice of the subcommittee's interest in his testimony. We wanted Mr. Gorsky to come forward with J&J's side of the story, but he declined. We can only speculate as to why I am currently speaking to an empty chair.

But here are the facts. There is evidence that, for decades, tests have repeatedly found that Johnson & Johnson's talc-based baby powder contained asbestos. More sensitive testing methods than those used by Johnson & Johnson have detected asbestos in talc. In fact, in an internal Johnson & Johnson memo from 1975, employees discussing—discuss suppressing the use of sensitive asbestos-detection methods stating, and I quote, we want to avoid promotion of this approach. But Mr. Gorsky is not here to speak to that.

There is evidence to suggest that when citizen petitions to the FDA in the late 1980's and early 1990's demanded that J&J label its powder with a cancer warning, the company pushed forward during that same time period with an aggressive marketing plan for communities of color as its sales to Caucasians declined. But Mr. Gorsky unfortunately is not here to speak to that either.

We also have evidence that in 2008, Johnson & Johnson commissioned Research International, a market survey consultant, to conduct a consumer survey to determine public perceptions of its powder's name. The company learned then that women preferred the cornstarch-based powder over the talc-based powder and that women had a particular aversion to the words "talc" and "talcum," with one respondent even stating, quote, I don't like what that word brings to mind. Yet as you can see behind me, the company made an intentional decision to prominently feature cornstarch on the front of its cornstarch-based bottle, while failing to do the same by labeling the word "talc" on the front of its talc-based baby powder. Unfortunately, Mr. Gorsky is not here to speak to that.

Yet Mr. Gorsky's company has chosen to speak out and push back against every instance over the last two months in which asbestos has been detected in samples of Johnson & Johnson's talc-based baby powder, including the FDA's own analysis.

At this very moment, I am sending a document request to Johnson & Johnson seeking answers. We are asking the company to explain its decisions to disregard consumer preferences for cornstarch over talc, why the company continues to keep its talc powder on the U.S. market when countries like Canada are issuing findings to its citizens against the use of talc, and why the company refuses to attach an adequate carcinogen warning to the label of its talc-based baby powder, even as generic alternatives do so.

This subcommittee will not rest until it has answers to these questions. It's what the American people and public health deserve.

I now recognize our colleague, Mr. Comer of Kentucky, for five minutes for his opening statement.

Mr. COMER. Well, thank you, Mr. Chairman. I want to thank all the witnesses that are here today to testify.

The issue we're discussing today is extremely important. Any possible risk from widely used consumer products should be a concern for everyone. I'm confident that everyone in this room used some type of consumer products this morning, the safety of which we all take for granted. So I believe it's important that the committee hear from experts about possible talc contamination, the state of scientific understanding about the issue, and whether there are regulatory changes that should be considered with regard to

the FDA and other agencies. However, there are several things regarding this hearing today that I'm uncomfortable with.

First, I'd like to address the witness listed by the majority for today's hearing—the witnesses. Committee Democrats announced that there will be a second panel today featuring Johnson & Johnson CEO Alex Gorsky. However, since the majority was well aware in advance of today's hearing that Johnson & Johnson did not believe the CEO was the appropriate witness for the subject matter specified by the majority and that, therefore, he would not be appearing today, today's proceedings, as they relate to his testimony, appears to be for the benefit of the media and the audience.

Upon receipt of the invitation to this hearing on November 18 for the explicit purpose of examining, and I quote, methods used to detect asbestos in talc, the company has operated in good faith to provide an appropriate witness for this hearing. Mr. Gorsky's background is not in asbestos-detection methods and he does not have firsthand knowledge of such methods.

Given the hearing topic identified by the committee majority, Johnson & Johnson offered a recognized expert on talc geology testing methods. When that witness was rejected, the company proposed that Kathleen Widmer, the chair of Johnson & Johnson's North American consumer division which oversees Johnson's baby powder, be allowed to appear. She's the highest-level executive who is directly knowledgeable about the supposed topic of today's hearing. Committee Democrats again rejected Johnson & Johnson's proposal.

Then in a supposed change of heart just a few days ago, the majority asked Ms. Widmer would—would be able to testify after all. Johnson & Johnson then refused to rearrange her schedule—or Johnson & Johnson then rushed to rearrange her schedule so that she could appear as they had originally proposed. However, later that same day, committee Democrats again changed course and said that she was not acceptable after all, and they insisted on Mr. Gorsky, who the company has repeatedly and convincingly stated is not an appropriate witness for the topic of the committee—of this committee Democrats' choosing today, as if Democrats needed more theater on the day they announced their partisan impeachment.

Mr. Chairman, Johnson & Johnson has, for the past years, shown a willingness to cooperate with the committee's investigation. It's provided briefings and it has produced documents requested by the majority. In fact, the company has produced nearly 10,000 pages of requested information and offered to provide an additional 300 pages. This offer of additional information was declined by the majority for unspecified reasons.

I worry, Mr. Chairman, that the activities related to witness invitations and document production leading up to today's hearing may result in the perception that the committee's investigation is not about learning new facts about the potential harm of consumer products, but rather is about trying to publicly shame or embarrass a company and seek out "gotcha" moments to aid in ongoing litigation, something this committee has been regularly doing over the past year.

I worry too that the committee's actions raise questions about whether it's using its investigative tools to interfere with or give

the appearance of interfering with ongoing litigation. More than 15,000 liability lawsuits have been filed against Johnson & Johnson over its talc-based products. This hearing is yet another example of the majority's actions, abiding by the trial bar, by holding hearings and requesting documents that are critical and otherwise difficult to obtain to plaintiffs' attorneys ability to litigate and file additional lawsuits. We've already seen evidence of this happening. One of the majority witnesses at its hearing on this topic earlier this year is now citing her testimony before Congress as part of her credentials during one of the ongoing lawsuits.

I hope the subcommittee will commit to doing its best to refrain from interfering or appearing to interfere with ongoing litigation as we move forward.

As I said at the beginning of my statement, the issue we are discussing here today is of the utmost importance. However, I hope we can approach the topic moving forward with a spirit of fairness and with an eye toward hearing from witnesses who can provide the best available science and not just those engaged in ongoing litigation.

With that said, I thank our witnesses for appearing before our subcommittee today.

Mr. Chairman, I yield back.

Mr. KRISHNAMOORTHY. Thank you very much, Mr. Comer.

Congressman—Congresswoman Maloney is with us, the new chairwoman of our committee, and I now recognize her to say a few words and give her opening statement as well.

Chairwoman MALONEY. Thank you. Thank you so much, Mr. Chairman, for holding today's critical hearing. And thank you for your subcommittee's dedication to protecting public health.

In October 2019, FDA announced that it detected asbestos in Johnson & Johnson's baby powder, leading the company to recall more than 30,000 bottles. Since then, Johnson & Johnson has publicly questioned the integrity of FDA's findings, casting doubt on the accuracy of the testing that was conducted.

The American people need to have faith that the products, that they are safe; and that is part of FDA's critical role. If Johnson & Johnson claims there is some problem with FDA's methods or procedures, they need to explain those allegations in detail and provide the basis for their allegations.

Unfortunately, as the chairman explained, the CEO of Johnson & Johnson, Alex Gorsky, has declined the subcommittee's invitation to testify here today. He has spoken to the press, issued public statements, and testified in litigation, but he apparently does not want to defend his company's actions here today. That is unfortunate and, frankly, unhelpful.

I hope and encourage the subcommittee to continue its important work on behalf of the American people, and I pledge my support as they do so. Thank you, again, Mr. Chairman, for this important hearing.

And I yield back.

Mr. KRISHNAMOORTHY. Thank you very much, Chairwoman Maloney.

I would like to now recognize Ranking Member Jordan for an opening statement, if you wish.

Mr. JORDAN. Thank you, Mr. Chairman. I'm fine. Our ranking member, Mr. Comer, has said what needed to be said. Thank you.

Mr. KRISHNAMOORTHY. Really? This is the first time I have ever heard you say that. Thank you. Thank you, Mr. Jordan.

Well, our first panel today should have had the opportunity to—should have been our opportunity to hear from Alex Gorsky, the CEO of Johnson & Johnson. Mr. Gorsky was aware of our interest back in March and said that our committee needed to hear their side of the story. We invited Mr. Gorsky to come before us one month ago, and yet Mr. Gorsky is not here.

Mr. Gorsky can still make this right. He can respond quickly and thoroughly to our document requests, and he can come testify before us at a future hearing, because we will continue to examine this issue, because it is not going away. Too many people are demanding too many answers to important questions, and the safety of Johnson & Johnson's talcum-based cosmetic products is now in serious doubt. Too many people have come forward with evidence of being harmed by these products. Consequently, this issue is not going away, and this committee will press forward with its inquiry.

With that, we will adjourn this panel and ask that the expert witnesses come forward to commence the next panel. Thank you.

Mr. KRISHNAMOORTHY. Thank you. We will now resume our proceedings.

Today, we are joined by a panel of witnesses that will help us examine the best methods to detect asbestos in talc.

Mr. David Etheridge, a Presbyterian pastor joining us from Norfolk, Virginia, will speak about his personal struggles to overcome mesothelioma, which he believes could have been prevented if more sensitive test methods were standardized to test for asbestos in talcum powder.

Dr. William Longo is a lab scientist at Material Analytical Services, LLC, which has tested decades of samples of Johnson & Johnson's talc-based baby powder. He will share his disturbing findings with us, detecting asbestos in the majority of Johnson & Johnson's samples that he tested.

Dr. Jacqueline Moline is the chairperson of the Department of Occupational Medicine, Epidemiology, and Prevention at the Donald and Barbara Zucker School of Medicine at Hofstra University. She is also the director of the Northwell Health Queens World Trade Center Health Program and the director of the New York state-funded Occupational and Environmental Medicine of Long Island clinical center. She will share her insights from a published case study of 33 patients with mesothelioma, male and female. She will speak about their exposures to talc-cased powders and what broader lessons we must understand for public health.

Last, Dr. Rod Metcalf. He's a geologist from the University of Nevada, Las Vegas. Dr. Metcalf will help us understand the genesis of naturally occurring minerals often found in nature together, talc and asbestos, and the dangers both pose.

If you would all please rise and raise your right hands, I will begin by swearing you in.

Do you swear or affirm that the testimony you're about to give is the truth, the whole truth, and nothing but the truth, so help you God?

Let the record show that the witnesses answered in the affirmative.

Thank you, and please be seated.

The microphones are sensitive, So please speak directly into them. Without objection, your written statements will be made part of the record.

And with that, Dr. Longo, you are now recognized for five minutes.

STATEMENT OF DR. WILLIAM LONGO, SCIENTIST, MATERIALS ANALYTICAL SERVICES, LLC

Mr. LONGO. Thank you, Chairman.

Mr. KRISHNAMOORTHY. You have to press the button. Sorry.

Let me just explain the lighting system here. Press the button to speak. Green means go. Yellow does not mean to stop; it means speed up. And then red obviously means please conclude. OK? So you have five minutes to speak. Thank you.

Mr. LONGO. Thank you, Chairman and ranking members and—Ranking Member and esteemed members of this subcommittee for giving me the opportunity to discuss the best methods for determining asbestos in cosmetic talc.

My name is William Longo. I have a Ph.D. in the area of material science and engineering. And I am the president of Materials Analytical Services, LLC, or simply MAS. I've been involved in asbestos analysis and research for over 30 years now. I have testified on behalf of both plaintiffs and defendants in asbestos cases.

Independent labs throughout the country and over the course of several decades have documented the presence of asbestos in consumer talc products, including Johnson's baby powder. AMA Analytical, Forensic Analytical, MVA Scientific Consultants, our own lab MAS, and Johnson & Johnson's own consultants, Colorado School of Mines, Dartmouth University, McCrone Associates, Rutgers University, the RJ Lee Group and others have all documented asbestos in Johnson's and other manufacturers' talc products over the course of decades.

The talc industry has, in that time, accumulated hundreds, if not thousands, of testing results that report no detectable or no quantifiable asbestos. These reports regarded by manufacturers as negative are very misleading, as they result from analytical mythological techniques with poor detection limits.

The question I would like to address in my testimony today is why the testing methods adopted and used by the cosmetic talc industry have regularly failed to detect asbestos and what improved, through certainly not new, test methods can help ensure that we are doing our best to find asbestos in talc.

The answer, in short, is straightforward and should not be controversial to anyone. The methods used in the past and today by the industry are not sensitive enough to detect trace levels of asbestos. We should have analytical methods that achieve the highest degrees of sensitivity and the lowest detection limits plausible. Let me explain.

The first thing to understand is that asbestos fibers are very small and virtually weightless. They're measured in picograms or trillionths of a gram. Millions and millions of asbestos fibers can

be present in a single gram of talc, even if the total asbestos by weight is less than 0.01 percent. So good analytical sensitivity is extremely important when looking at very small samples at very low weight percentages.

Analytical sensitivity is simply how many asbestos fibers must be present in the talc sample for the analyst to see a single fiber.

The laboratories used by the talc industry, and recently by FDA contract laboratory, have very poor analytical sensitivity, with detection limits of approximately 10 million to 14 million asbestos fibers per gram. That means that for the microscopist to detect a single asbestos fiber in the talcum powder sample, that needs to be between 10 million to 14 million asbestos fibers present per gram.

So any analytical method for the detection of asbestos in talc must have good sensitivity, but good sensitivity does you no good if your sample preparation method doesn't allow you to see the asbestos in something that is 99 percent talc.

It's been estimated that for every one asbestos fiber in cosmetic talc, there are 600,000 talc particles. These big plates of talc prevent the analyst from being able to see the asbestos, another reason for poor analytical sensitivity.

This problem can be solved with a sample preparation method called heavy liquid separation, HLS. This technique can separate and remove substantial amount of the talc, leaving behind any amphibole asbestos that might be present, making it far easier and quicker analysis, along with substantially better sensitivity.

As stated, the industry analytical sensitivity is between 10 million to 14 million asbestos fibers per gram. Our laboratory, using the HLS sample preparation method for cosmetic talc and TEM samples, we have been able to increase that analytical sensitivity to approximately 4,500 asbestos fibers per gram. Using HLS, we have detected amphibole asbestos in approximately 65 percent of all the cosmetic samples we have analyzed in the last three years.

The HLS method is not new to Johnson & Johnson or to the talc industry. In the early 1970's, both the Colorado School of Mines and Dartmouth University successfully developed an HLS method and presented it to J&J. The company never adopted the method, stating in the early 1970's memo that it may be too sensitive and not in their best worldwide interest to employ.

Last, if the cosmetic powder manufacturers insist on continuing to use their talc in their cosmetic products, it is vital to the public safety that the most sensitive method must be required. At this time, there is no dispute that this is the HLS preparation method with analysis by TEM.

An important caveat: Even using the best method, one can never state that cosmetic talc does not contain asbestos, only that the results fall below the detection limit. The only true solution to this problem is to ban the use of talcs in cosmetics products.

Thank you, Representatives.

Mr. KRISHNAMOORTHY. Thank you, Dr. Longo.

Next to Dr. Moline.

STATEMENT OF DR. JACQUELINE MOLINE, PROFESSOR, FEINSTEIN INSTITUTES FOR MEDICAL RESEARCH AT NORTHWELL HEALTH

Dr. MOLINE. Good afternoon, Chairman Krishnamoorthi, Ranking Member Jordan, Mr. Comer, and members of the committee. I'm honored to be here today. My name is Dr. Jacqueline Moline. I'm a board certified physician at Northwell Health, specializing in occupational and environmental medicine which deals with the impact of exposures on the health of individuals, including asbestos.

Asbestos has caused thousands of deaths in the United States. Legislation pending, the Alan Reinstein Ban Asbestos Now Act of 2019 is currently under consideration by Congress. It is time for us to ban this deadly substance.

Asbestos fibers are microscopic. About 200,000 asbestos fibers could fit on Abraham Lincoln's nose on the penny. Once these fibers are breathed in, they can penetrate deeply in the lungs and move throughout the body.

The most devastating disease from asbestos is mesothelioma, which is a cancer of the lining of the lungs or the abdomen. It's considered a signature disease, meaning its diagnosis almost always indicates asbestos exposure. As a result, treating doctors ask patients diagnosed with mesothelioma whether they were exposed to asbestos.

For men, the evidence is often easy to identify. Many of my patients sought care because they knew they'd worked with asbestos. For women, sometimes it's easy to identify, because they lived with someone who worked with asbestos and they laundered their dusty clothes. Yet for many women and some men, they had no traditional source of asbestos exposure. As a result, their cancers were considered idiopathic or having no cause. There's no sound scientific reason for a gender discrepancy, apart from workplace exposures and could not be explained merely by chance.

In my opinion, this conundrum has been solved. The presence of asbestos in cosmetic talc more commonly used by women is likely the cause of women's mesothelioma and men's mesothelioma. This talc exposure was their only exposure to asbestos. If doctors aren't aware that asbestos contaminated talcum powder, they don't ask about its use, nor consider it as a source.

To my knowledge, there have been no studies that look at end users of cosmetic talcum powder, but to address this gap, I recently published an article in the Journal of Occupational and Environmental Medicine. My colleagues and I reported on 33 individuals whose only source of asbestos exposure was the cosmetic talc. For six of the 33, we tested their tissue and found asbestos in talc. Years before, other scientists too had looked at lung burdens of women with mesothelioma, found the types of asbestos commonly found in talcum powder, and stated that the asbestos might be used—might be related to their use of contaminated talc.

I'd like to tell you about Ms. D, who is a 66-year old woman who developed shortness of breath, chest wall pain, weight loss, and fatigue. A chest x-ray showed fluid surrounding her lung, and she had 1,600 milliliters of fluid, more than about seven of these water bottles on this table in front of me, removed from her lungs. She eventually had surgery to take tissue samples for diagnosis and

had mesothelioma. She also had a pleural plaque, which is a hallmark finding of prior asbestos exposure. Unfortunately, despite aggressive treatment, she passed away two years after her diagnosis.

She had worked in various industries, including textile and tobacco, and had no exposure to asbestos. However, she did have exposure to cosmetic talc in two settings. She worked part time as a hairdresser for 25 years, and she applied talcum powder to her customers' necks after she cut their hair. She used cosmetic talc on her body for 30 years, beginning with when her mother used talcum powder on her and she later used it on herself. She stated there would be a puff of smoke and it went everywhere. Now, asbestos can linger after that initial application and affect not only the health of the user, but also family members.

In our study, the age of diagnosis was 27 to 88 years. The average number of years of cosmetic talc use was 32.7.

Cosmetic talc use was not confined to one brand. There were 22 different brands used. Like Ms. D., patients often used more than one type of cosmetic talcum powder.

Fortunately, mesothelioma is a very rare tumor. Around 3,000 new cases are diagnosed in the United States yearly. Unfortunately, it's not curable. Five-year survival for pleural mesothelioma is less than five percent. Peritoneal mesothelioma is somewhat better.

In 2019, the Finnish Institute for Occupational Medicine stated that asbestos fibers of a thickness of three micrometers or less and a length of five micrometers or more cause a risk of cancer and pulmonary diseases when inhaled, regardless of whether they've been formed as a result of geological process metamorphosis or an industrial process such as in mining.

What matters to me as a doctor is not the nomenclature. Any particle of asbestos that's small enough to be inhaled is three times longer than it's wide, can cause disease, including mesothelioma. Using terminology to somehow differentiate whether a particle is asbestiform or cleavage fragment obfuscates the issue and is just semantics. If it can be breathed into the lung, the body doesn't care how the fiber grew. From a clinical perspective it's really quite simple.

Millions of individuals have been exposed to asbestos from contaminated talcum powder. There are safer alternatives on the market that don't contain talcum powder or asbestos. In my specialty, we strive to identify, treat, and prevent future illnesses related to exposures and hazards. If there's any possibility of the presence of asbestos, why should we take the chance?

Thank you. I'd be happy to take questions.

Mr. KRISHNAMOORTHY. Thank you, Dr. Moline.

Votes were called. We're just going to finish up the opening statements and then recess briefly.

Mr. Etheridge, you have five minutes.

STATEMENT OF DAVID ETHERIDGE, PATIENT

Mr. ETHERIDGE. Good afternoon, Chairman Krishnamoorthi and other members of the subcommittee. Apparently, quiet news days are hard to find around here lately, so I especially appreciate your presence today and your interest in this important topic.

I'm David Etheridge. I'm a Virginian and, for most of my life, a Presbyterian pastor, husband, father of two, and more recently, a grandfather.

At the age of 56, I was diagnosed with a rare and deadly type of cancer called peritoneal mesothelioma. Because the only known cause of mesothelioma is exposure to asbestos, my doctors and others quizzed me about my potential exposure. They asked about the places that I had worked and lived and school, where my family members worked, which dorms were my home during my stay at the College of William & Mary, trying to find some point of exposure to asbestos. They asked hundreds and hundreds of questions, but found no explanation.

As it turns out, my mother was a liberal user of powder, and throughout her life, she used it on herself, and when I was an infant, she used talc-based Johnson & Johnson baby powder on me quite liberally. From the day she brought me home from the hospital until the age of three, she and my older sister covered me with baby powder every time that they changed my diaper.

As an adult, trusting the product that had been used on me for so long, I used Johnson & Johnson baby powder on myself for a time, and my sister also used the powder on herself and now she has ovarian cancer, which makes you wonder, doesn't it?

Since then, I've learned that whenever talc is mined from the ground, it has impurities that are mined along with it, including asbestos fibers. It was these fibers that got into my system and migrated to my peritoneal cavity, which caused a slow-growing tumor that debilitated me at the height of my career. Baby powder containing talc was the source of my asbestos exposure and the cause of the cancer that will kill me.

Awaiting treatment, doctors withdrew six liters of fluid from my peritoneal cavity. This they did twice so that I could breathe until the surgery. And then I came here to the MedStar Washington Hospital Center where Dr. Paul Sugarbaker performed an 11-hour surgery on me, removing my spleen, my entire colon, the tail of my pancreas, and 6-1/2 pounds of cancer. He washed my insides with a strong solution of chemotherapy and then sewed me back together for a 20-day stay in the hospital.

On my 57th birthday, they sent me home with a tube in my arm for the liquid food and antibiotics that would keep me alive for the next month, after which I endured 15 weeks of chemotherapy and rehabilitation and total exhaustion. I lost 50 pounds.

After six months away from the church that I served, I returned to work; but nine months later, more cancer was found, cancer that cannot be remedied or radiated or cured. So I resigned my position and I ended the service that I had felt called to since the age of 16, and I made my preparations to die.

I understand that you all have friends who have cancer. I realize that 1,600 people die every single day from cancer, and I'm thankful that mesothelioma has not yet taken my life, but cancer was caused by a product that is used on the most vulnerable members of our society, infants. This is the cancer that will kill me. In fact, the people who apply these products, like my mother and sister, are completely unaware of the suffering that may occur or the death that may follow as a result of simply drying a baby's bottom.

My case illustrates the sad truth that we cannot trust the talc industry to regulate itself in this matter. Since 1906, we have known that asbestos is deadly, and yet somehow it has shown up in baby powder yet again. We owe it to our Nation's children, parents, and every other consumer to ensure that our baby powder is truly safe and asbestos-free. Despite decades of promises to do so, the industry has not regulated itself. Therefore, you must.

May God bless you in your work.

Mr. KRISHNAMOORTHY. Thank you, Mr. Etheridge.

Dr. Metcalf, you have five minutes.

**STATEMENT OF ROD METCALF, PROFESSOR, GEOLOGIST,
UNIVERSITY OF NEVADA, LAS VEGAS**

Mr. METCALF. Chairman Krishnamoorthi, Ranking Member Jordan, and members of the subcommittee, thank you for inviting me today. My name is Dr. Rodney V. Metcalf. I hold bachelors, masters, and Ph.D. degrees in geology. I have served on the faculty of the Department of Geoscience at the University of Nevada, Las Vegas, for nearly 30 years. My current research focus is on understanding the geologic processes responsible for the formation of amphibole asbestos.

I am here today to discuss the geological controls and processes that form talc and asbestos and the potential for talc and asbestos to coexist in talc ore and whether or not it is reasonable to expect talc ores to be free of asbestos minerals.

When processes in scale are considered, the probability that talc and amphibole asbestos coexist in talc-rich rocks is very high. Talc and amphibole asbestos minerals can and certainly do coexist at scales that cannot be separated during mining of talc. Though not impossible, it is improbable for geologic processes to produce 100 percent pure talc in mineable volumes.

Talc and asbestos are naturally occurring silicate minerals. Asbestos refers to six regulated fibrous minerals and include the serpentine mineral chrysotile and five fibrous amphibole minerals. While chrysotile is always fibrous, amphiboles occur in both fibrous and nonfibrous morphologies that leads to this issue of cleavage fragments which I'd be happy to discuss during the questioning.

Talc and asbestos are formed by water-rock interaction during a type of metamorphism called hydrothermal alteration. During this process, a preexisting rock called a protolith, or a first rock, is subjected to changes in temperature, pressure, and the infiltration of hot waters. These changes drive reactions where minerals and a protolith break down to form new stable minerals. The water has the capacity to alter the bulk chemical composition of the protolith by the addition and the removal of dissolved components as fluids flow through the rock over time.

When water-rock interaction produces significant shifts in protolith composition, the process is called metasomatism, and it's thought to be responsible for the production of talc-rich ores. Amphibole asbestos is formed by the same water-rock interactions that form talc.

The two questions of particular interest here today are: One, are talc-producing reactions linked to the formation of amphibole as-

bestos? In other words, might we expect to find amphibole asbestos in talc? The answer to this is yes.

Many talc-forming reactions involve the breakdown of amphibole under geologic conditions that are favorable for the generation of fibrous morphology, in other words, amphibole asbestos. For these reactions, incomplete reaction progress results in the retention of amphibole asbestos in talc-rich rocks. Talc-anthophyllite transition particles, which are well-known in the literature in talc ore, are interpreted as relics of these incomplete reactions.

The second question: Are there metamorphic processes capable of producing a rock of 100 percent pure talc, that is, a talc rock free of asbestos? The answer to this question is theoretically yes, but only under very specific conditions—geologic conditions. Talc can be produced by reactions involving the breakdown of carbonate minerals, a reaction pathway that does not pass through amphibole asbestos, as long as the process operates in a specific range of temperature.

Thus, metasomatism of carbonate protolith at a specific temperature could produce asbestos-free talc. However, if the process is started at a slightly higher temperature, amphibole asbestos can form. Talc containing amphibole asbestos is known from talc deposits formed by the alteration of these carbonate protolithologies.

Asbestos in cosmetic talc is considered a health hazard to consumers even at levels labeled as non-detect by the industry J4-1 method. We should not be surprised when more sensitive testing methods find asbestos present in talc ores and talc products, given that the formation of asbestos and talc are likely—are linked by common geologic processes.

Although we often refer to asbestos as a contaminant in talc, as though it were an introduced foreign substance, asbestos can occur as a relic component of the natural talc-forming geologic processes, and its presence should be anticipated.

Thank you for your time today. I'm available for questions.

Mr. KRISHNAMOORTHY. Thank you very much.

The committee will now stand in recess, subject to the call of the chair. I ask members to please return promptly after the vote series.

We'll be back shortly. Thank you.

[Recess.]

[2:45 p.m.]

Mr. KRISHNAMOORTHY. The subcommittee will come order.

Thank you so much, and sorry for the pause in the proceedings. What we are going to do is start with questions, and I now recognize myself for five minutes of questions.

Dr. Moline, is there any safe level of asbestos in consumer talc-based products?

Dr. MOLINE. No.

Mr. KRISHNAMOORTHY. And why is that?

Dr. MOLINE. There's no safe level of asbestos, period. It's a carcinogen. It's a type 1 carcinogen, and there should be no exposure.

Mr. KRISHNAMOORTHY. Dr. Longo, both the FDA and the EPA agree that there is no safe or acceptable level of asbestos for human exposure, correct?

Mr. LONGO. That is correct.

Mr. KRISHNAMOORTHY. In fact, just this past year, Johnson & Johnson's CEO, Alex Gorsky, was asked in a deposition whether asbestos is safe. He stated, quote: I would agree that asbestos is considered unsafe. I'm not an expert geologist or a safety expert in that particular area, but, generally speaking, we would say, yes, asbestos is not safe.

On October 18, the FDA announced it had detected asbestos in J&J's talcum powder. Dr. Moline, what is the significance of this announcement?

Dr. MOLINE. That, to this day, they're finding asbestos when they go off the shelf in talcum powder, and it's putting thousands, if not millions, of people at risk in the future.

Mr. KRISHNAMOORTHY. Dr. Longo?

Mr. LONGO. That is correct. And those results verify our results of finding amphibole asbestos in the Johnson & Johnson's product from the Chinese mine, which is the mine that's being used today.

Mr. KRISHNAMOORTHY. Dr. Longo, it's important that we have sensitive testing methods to detect any level of asbestos in consumer products, right?

Mr. LONGO. Yes, sir. That's correct.

Mr. KRISHNAMOORTHY. And you personally tested historical samples of J&J's talcum powder, correct?

Mr. LONGO. Yes, our laboratory has.

Mr. KRISHNAMOORTHY. And from what decades did you test this powder?

Mr. LONGO. We have analyzed samples from the forties all the way up to the 2000's, as well as the—as well as the current Johnson & Johnson products.

Mr. KRISHNAMOORTHY. And what did you find?

Mr. LONGO. Overall, 65 percent of all the samples we've tested were positive for regulated asbestos.

Mr. KRISHNAMOORTHY. Did you use the same asbestos detection methods as J&J?

Mr. LONGO. No, sir, we did not.

Mr. KRISHNAMOORTHY. And how did they differ?

Mr. LONGO. We used what is called a heavy liquid separation technique, which makes the analysis a lot more sensitive.

Mr. KRISHNAMOORTHY. And do you believe that sensitivity is essential to detecting asbestos in talc?

Mr. LONGO. Absolutely.

Mr. KRISHNAMOORTHY. Now, has Johnson & Johnson ever acknowledged any asbestos detection tests that have concluded that the company's samples contain asbestos?

Mr. LONGO. Not that I'm aware of.

Mr. KRISHNAMOORTHY. So just so I understand, you've tested historical samples from the forties through today—

Mr. LONGO. Correct.

Mr. KRISHNAMOORTHY [continuing]. using this HLS method of detection, and in those tests, you've determined 65 percent of those samples contain asbestos; but on the other hand, Johnson & Johnson has never acknowledged that any of their samples contain asbestos. How could that be?

Mr. LONGO. Not currently they haven't. Certainly, their—some of their testing have consultants in the past. They don't acknowledge

it. They say that what we are testing is really not asbestos, and now it comes down to the argument of what's the gee—excuse me—the geometry of the fibers versus what they call cleavage fragments?

Mr. KRISHNAMOORTHY. Okay. And why does that matter?

Mr. LONGO. Well, on our side, it doesn't matter, because we're following absolute regulated protocols to identify asbestos recognized by EPA, OSHA, the ASTM, as well as the International Standards Organization. It's a defining on what the definition is. It's misleading at best.

Mr. KRISHNAMOORTHY. Okay. Now, as you know, on October 18, FDA announced its contract lab found asbestos in J&J's talcum powder. Did FDA's contract lab, this is the AMA firm, did they use the HLS method?

Mr. LONGO. They did not.

Mr. KRISHNAMOORTHY. What kind of method did they use, do you know?

Mr. LONGO. I would call it the standard method where you have to find a needle in a haystack, and every now and then, you'll find that needle, but it's rare. And they've had a rare event, in my opinion, that they found the needle in this particular bottle.

Mr. KRISHNAMOORTHY. So what would have happened had they used the HLS method of detection, which is a much more sensitive method?

Mr. LONGO. If they had used that method as in its current state, they would not have found the chrysotile asbestos, but they could have found the amphibole asbestos, which is what that method is really designed for.

Mr. KRISHNAMOORTHY. And, again, tell us, what is the significance of finding one type of asbestos versus the other?

Mr. LONGO. No significance, because they're both regulated. The significance is, is that current products are being sold with trace amounts of asbestos in it.

Mr. KRISHNAMOORTHY. Just so I understand, either one would be carcinogenic?

Mr. LONGO. That's not my area, but I think Dr. Moline would tell you that either one is carcinogenic.

Mr. KRISHNAMOORTHY. Dr. Moline, do you want to tell us if either one is carcinogenic?

Dr. MOLINE. All of the forms of asbestos are carcinogenic.

Mr. KRISHNAMOORTHY. Thank you.

Let me now recognize Congresswoman Miller for five minutes of questions.

Mrs. MILLER. Thank you, Chairman Krishnamoorthi.

The Oversight Committee has long played an important part of overseeing the role government plays in protecting the public. Congress has mandated the Food and Drug Administration be the responsible one for regulating certain products, including consumer cosmetics that use talc. While the committee has the jurisdiction to complete this oversight on the possibility of asbestos in talc, today's hearing does nothing to accomplish that goal.

Johnson & Johnson has provided over 10,000 pages of material to the committee on their asbestos testing methods and have offered to provide over 300,000 more. My colleagues on the other side

of the aisle declined to receive them. Johnson & Johnson has also offered to have its own experts in asbestos testing appear in front of this committee to provide real documentation and evidence and, again, has been unfortunately denied.

This hearing does not help consumers, and it is neither the right forum nor the fair process needed to have this important conversation. It is inappropriate for this committee to attempt to influence ongoing litigation. Today's hearing is not the role of this committee, and I look forward to the opportunity to perform the oversight duties that the American people elected us to do in order to keep us safe.

Dr. Longo.

Mr. LONGO. Yes, ma'am.

Mrs. MILLER. Is it true in the early 2000's you testified under oath that talc containing asbestos was an urban legend?

Mr. LONGO. Yes, ma'am. Oh, sorry. Yes, ma'am, I did.

Mrs. MILLER. What has changed since then?

Mr. LONGO. What has changed since then is we've been using a much more sensitive method, and that was at the time that we did not receive or had the opportunity to look at thousands and thousands of Johnson & Johnson confidential documents showing that their own testing of their own products in their own mines had regulated asbestos in it, and we were not using the most sensitive techniques. And since that time, in three years, we have analyzed over 109 Johnson & Johnson bottles and found 65 percent of them positive for regulated asbestos using heavy liquid density separation and many other cosmetic talc companies.

Mrs. MILLER. How long has that testing been available?

Mr. LONGO. It was initially been available since, for Johnson & Johnson, when their consultants, in 1973 and 1974, developed a heavy liquid density separation method for amphibole asbestos and presented it to Johnson & Johnson.

Mrs. MILLER. But in 2001, when you were asked if you were familiar with the asbestos content of cosmetics, you said: In my field I have. It's sort of like an urban legend about the talcs in cosmetics containing tremolite. I've never been able to verify that.

Mr. LONGO. Yes, ma'am, I did say that back in 2001. And, again, that's before we received all the confidential documents from Johnson & Johnson showing that they had a heavy liquid density method separation process that was presented to them in 1973 and 1974, and Johnson—

Mrs. MILLER. Have you ever visited a talc mine that supplies Johnson & Johnson product?

Mr. LONGO. No, ma'am, I haven't.

Mrs. MILLER. Has your lab ever tested a Johnson & Johnson product that has been confirmed positive for asbestos?

Mr. LONGO. Yes. We have tested many Johnson & Johnson products that we have confirmed positive for asbestos, as well as other laboratories.

Mrs. MILLER. Dr. Moline, in your written testimony, you cite a study by Dr. Victor Roggli, but Dr. Roggli says that cosmetic talc does not cause cancer. Is that correct?

Dr. MOLINE. I'm not sure what study you're referring to. The study I was referring to was from early work he did where he analyzed the lung tissue of women with mesothelioma and—

Mrs. MILLER. This was 2019. Specifically, in August 2019, Dr. Roggli stated that he and his fellow researchers identify no evidence of any causative role of cosmetic talc in malignant mesothelioma—oma.

Dr. MOLINE. I think that doctors may disagree on that, and I think the weight of the evidence is to the contrary, but he's entitled to his opinion.

Mrs. MILLER. Thank you.

I yield back my time.

Mr. KRISHNAMOORTHY. Thank you, Congresswoman Miller.

Now, Congresswoman Pressley, you have five minutes.

Ms. PRESSLEY. Thank you, Mr. Chairman, for holding this important hearing today.

And, respectfully, I disagree with my colleague across the aisle. I think this is the very exact vehicle and forum where this sort of oversight is supposed to take place. This is the committee where we pursue truth and justice for the American people, and there has been a great injustice done to many, and so I'm grateful for the hearing today.

I find it insulting to this committee and to the men and women across this country whose trust in Johnson & Johnson has destroyed their lives or the lives of their loved ones. Today, we have heard brave testimony from people like Pastor Etheridge.

And let me say what Mr. Gorsky wouldn't. I'm sorry. Sorry for the pain you have endured, because you put your trust in a company that placed profits over your very life and safety.

When Johnson & Johnson asks people to trust them, the FDA should have said, show us. Show us that your products aren't hazardous. And when they refused to do this, when research showed that asbestos was showing up in their talc and baby powder, rather than inform the public through warning labels, Johnson & Johnson tried to discredit it. They looked for ways to sell more of it, and they set their sights on Black and Hispanic women.

Mr. Gorsky, I hope you are watching today, because we still want answers. And that's exactly why Representative Schakowsky of Illinois and I earlier submitted a letter that we plan—submitted a letter so that we can continue to get to the bottom of this and to demand answers and accountability for those who have been harmed by Johnson & Johnson because of their company's greed, and they deserve to be held accountable.

Pastor Etheridge, I know you had to step away from the pulpit, but I could argue as a woman of faith that your ministry continues as evidenced by your testimony here today.

Could you share with us, what were your initial symptoms?

Mr. ETHERIDGE. My initial systems were unexplained weight loss. I never lost weight by accident in my entire life. I had fever, shortness of breath, and fatigue.

Ms. PRESSLEY. And so—and was there—was there any other context around this? Were you going on a trip or something or—

Mr. ETHERIDGE. We were on vacation in Hawaii—

Ms. PRESSLEY. Okay.

Mr. ETHERIDGE [continuing]. and had some—I was taking antibiotics and my symptoms, instead of getting better, were getting worse, and so we went to an ER and I was diagnosed with cancer at that time. It was later determined, upon my return home, that it was mesothelioma.

Ms. PRESSLEY. Thank you.

I have some more questions and, due to the interest of time, if you'll please try to answer them as succinctly as possible, preferably with a yes or no answer.

Did you consult additional doctors when you returned from vacation?

Mr. ETHERIDGE. Yes.

Ms. PRESSLEY. Did your doctor discuss with you the causes of mesothelioma?

Mr. ETHERIDGE. Yes.

Ms. PRESSLEY. Have you ever been exposed to asbestos in your profession as a pastor?

Mr. ETHERIDGE. No.

Ms. PRESSLEY. How long have you been a pastor?

Mr. ETHERIDGE. I was a pastor for 33 years.

Ms. PRESSLEY. How often in adulthood would you use Johnson & Johnson's talcum baby powder and for what purpose?

Mr. ETHERIDGE. Maybe two or three times a week to powder my genitals after I showered.

Ms. PRESSLEY. Common.

Again, I'm so sorry for the pain you have endured. As a lawmaker, I know the power of having those closest to the pain driving our policy solutions, as well as the general accountability, given the jurisdiction or reach of this committee.

So just for the record, and you spoke to this in your earlier testimony, but I think it bears repeating, Pastor Etheridge, do you believe Johnson & Johnson's talc-based baby powder caused your mesothelioma?

Mr. ETHERIDGE. Yes, I'm convinced of that.

Ms. PRESSLEY. And if you had the opportunity to make policy changes to prevent other people from using products that cause mesothelioma, what would you do?

Mr. ETHERIDGE. At the very least, we should regulate the use of talc or add warning labels to the products, but, ideally, we need to get this stuff off the shelves.

Ms. PRESSLEY. All right. Well, we'll certainly do everything we can to ensure justice for you and your family. God bless you.

Mr. ETHERIDGE. Thank you.

Ms. PRESSLEY. Thank you. And I yield.

Mr. KRISHNAMOORTHY. I thank you Congresswoman. I'm going to use the remainder of your time for a couple of questions here.

Dr. Longo, when was the first known reporting of asbestos in J&J's talcum powder made public?

Mr. LONGO. The first reporting, I guess—I keep forgetting it.

The first reporting I think was only recently public.

Mr. KRISHNAMOORTHY. And was that positive asbestos finding conducted by an independent lab?

Mr. LONGO. Yes, sir, it was.

Mr. KRISHNAMOORTHY. And let me ask you this. In response to a couple of questions that you were asked, I think that they mentioned that earlier in 2001, you had indicated that you weren't aware of asbestos in talc powder. But then after reviewing documentary evidence, as well as conducting additional tests, you then learned of the presence of asbestos in talc powder.

Do you want to say anything more about that?

Mr. LONGO. Yes. It was early on and, as scientists, we keep our minds open. And then there—there was a published paper in 2014/2015, and then I became interested in it. And then finally in 2016, decided to go ahead, but had to look for a more sensitive method, and that's where the L—the liquid heavy density separation method came in.

Mr. KRISHNAMOORTHY. Thank you, Dr. Longo.

Now I will recognize Mr. Grothman for five minutes.

Mr. GROTHMAN. Thank you. This is a very interesting committee on oversight. You never know what you're going get. A different topic every day.

I'm a little bit disappointed here, and I'll say this because, of course, people back home are watching, this being filmed and we have four people testifying today.

As I understand it—and, of course, you know, we sometimes meet with people in our offices prior to these hearings—Johnson & Johnson had an expert they wanted to have testify. I understand majority party wanted Mr. Gorsky, I think was his name, the CEO, to testify, but not surprising, Johnson & Johnson wanted an expert. And I see we have three doctors testifying today. They wanted their own expert to be able to testify. It was the two sides to every story. I think their expert was a woman by the name of Kathy Widmer. And for whatever motivation, Kathy is not here today. She was not allowed to testify.

And I think it's disappointing, because I came here open-minded. I wanted to hear both sides of the story. I assume there's both sides to the story. As I understand it, there are four or five times in which an appellate court has ruled on this situation, and all four or five times, they've ruled in favor of Johnson & Johnson.

Now, I'm as jaded about courts as anybody, but I assume that when people have—when judges have time to review briefs, maybe read hundreds of pages on this topic, and they decide against the plaintiffs, there's something there. There's a story that I should be able to hear. And I resent a little bit of the fact that I'm not able to hear that story.

I don't think it's out of line for Johnson & Johnson to say we don't want our CEO to testify. We have three doctors testifying, and we want our own doctor, but we didn't hear their own doctor.

And I'll just say one more time that that's disappointing.

Mr. GROTHMAN. And in case anybody is paying attention to this hearing—paying attention to this hearing at home, for our home viewing audience, that they are aware that we're getting one side of the story today. I'll plunge ahead with that one side and see what I can hear from these folks.

As I understand it, four or times on appeal, judges decided that plaintiffs did not have a strong enough case or ruled against plaintiffs. I have other questions too, but I'll ask—because we don't have

the people on Johnson & Johnson's side here, could I ask, say, Dr. Longo, why on appeal does Johnson & Johnson seem to keep winning these cases?

Mr. LONGO. And, again, my understanding is the appeal had to do with jurisdiction issues, not anything to do with the science, and that's just my understanding.

Mr. GROTHMAN. Okay. And they sometimes won before juries as well. Again, juries don't always get it right, but they're juries who listen to all of the evidence, not just, you know, five-minute questions from Congressmen, and they are sometimes deciding that Johnson & Johnson has not done anything wrong in these cases.

Dr. Longo—and I hope this isn't true, but, you know, we're provided some stuff in advance here. You own a company, MAS, or have a 75 percent in MAS. Is that true?

Mr. LONGO. Yes, sir, I do.

Mr. GROTHMAN. Okay. And MAS makes money testifying or providing evidence before trials of this nature?

Mr. LONGO. Yes, sir. We do provide experts the bill for their time.

Mr. GROTHMAN. Yes. Could I find out how much on these cases, how much you've billed out total to—to claim that Johnson & Johnson is negligent in these cases?

Mr. LONGO. I believe MAS has billed for all its research and development and—and sample analysis and—

Mr. GROTHMAN. A hundred thousand? A million? Ten million? Thirty million? I mean, there are all sorts of numbers around out there. How much have you guys about billed out on this—on this matter?

Mr. LONGO. I would estimate in the two years—2017, 2018 and 2019, I would estimate somewhere a million, a million-point-2.

Mr. GROTHMAN. Okay. That's—

Mr. LONGO. I think. That's an estimate.

Mr. GROTHMAN [continuing]. total of—now, somebody gave me something. Maybe they're lying. They're saying total MAS may have billed out as much as 30 million, but you're saying it's only 1 or 2 million?

Mr. LONGO. Well, that's two different questions. MAS started in 1988, and for 31 years, we've probably—we have—we have averaged a million dollars in litigation. But you have to understand, we're a 20,000-square-foot laboratory, we have 43—

Mr. GROTHMAN. I understand you have got expenses. You—when people tell me that you might have billed out 30 million to take a side on this matter, are they lying to me, or is it about 30 million?

Mr. LONGO. I won't call somebody a liar, but that's just not true. If I had billed personally \$30 million—

Mr. GROTHMAN. Not personally. The company.

Mr. LONGO. If the company had billed—the company has not billed \$30 million involved in Johnson & Johnson—

Mr. GROTHMAN. Twenty million?

Mr. LONGO. No. I would say in the three years for the Johnson & Johnson litigation—

Mr. GROTHMAN. Total.

Mr. LONGO [continuing]. maybe 1.5 million.

Mr. GROTHMAN. Okay. Thank you much.

I hope some day we do have a chance to hear from Ms. Widmer.
Mr. KRISHNAMOORTHY. Well, thank you.

And the minority always has the option to provide a witness. They declined to do so today. Nobody.

Now we're going to call on Congresswoman Tlaib for five minutes.

Ms. TLAIB. Thank you so much, Chairman. I do sincerely appreciate you using this committee to kind of elevate the voices of people like the pastor here and others that have been impacted.

I think it's really hard for me to sometimes sit here and hear folks, you know, kind of be the—the defendant lawyers for the corporations. I mean, how much money, millions and billions of dollars, did Johnson & Johnson make in poisoning people? I mean, literally why aren't we asking that question?

Because I—you can't get away from the facts. FDA found asbestos in baby powder. Now remember, it's baby powder; it's not even—it's baby powder. Not only that, they later on—furthermore, reports state that the asbestos was detected in one of the tests Johnson & Johnson itself conducted using sample from the same bottle as the FDA, okay? Fact. Okay? FDA is coming to us saying this, okay? Are we going to say, oh, is FDA getting paid? No. These are—these are folks that are coming in trying to protect the public. That is our job. That is our job, to protect the public.

Reports show that Johnson & Johnson contracted with RJ Lee Labs. RJ Lee reportedly deviated from its standard testing procedures in order to deliver rushed results at the request of the company. Check this out. An RJ Lee scientist stated that Johnson & Johnson wanted, quote, very rapid turnaround for obvious reasons. Then the lab found asbestos in its sample, but later retracted its results and claimed that initial false detection was due to environmental contaminants in one of its testing rooms.

Johnson & Johnson discredited its own company that they hired and contracted out. They discredited RJ Lee's initial finding, blaming the asbestos detection on all kinds of stuff that is, you know, what we say in Detroit, BS.

Dr. Longo, have you evaluated this particular RJ Lee testing report?

Mr. LONGO. Yes, I have.

Ms. TLAIB. Yes. I mean, do you see what's the problem here? I mean, they found asbestos, correct?

Mr. LONGO. They detected asbestos in the actual talc samples, and then their controls are blanks. When they were analyzed, they did not detect asbestos.

Ms. TLAIB. And samples of a bottle of Johnson & Johnson baby powder have tested positive in two separate labs, correct?

Mr. LONGO. I know—yes, in the AMA lab as well as the RJ Lee lab.

Ms. TLAIB. And Johnson & Johnson proceeds to accuse both labs of being contaminated with asbestos.

Mr. LONGO. I know.

Ms. TLAIB. Dr. Longo, I mean, wow. Like, I am just—you know, I've only been here a year, but I'm just so taken aback that my colleagues don't even see it. I can't even make this stuff up. This is factual. I can't even make it up.

These FDA folks, they're not Republicans or Democrats. They're government officials that are doing their jobs, right, Pastor? I mean, that's what they're supposed to be doing. They're public servants. They're doing exactly what they were hired to do, which is protect the public. And I am just taken aback that my colleagues who represent—each of us represent close to 700,000 people back home, that doesn't expect us to be defendant lawyers for Johnson & Johnson who basically poison people. They expect us to defend them, to protect them. And we have to be—realize, like how much money did they make off of the human suffering of people?

My God, Pastor, 33 years, pastoring people. You know, I hope this is—like, this for you is—you are continuing your work for the people by—by talking about this in a very profound way through your own personal experience.

But I am just—you know, Chairman, I cannot stress enough just how important it is that this committee is used for good.

And that's exactly what we're doing. We're sharing exactly what is happening to people because of this. And they want to come up with these kinds of little conspiracy theories and all this other stuff. The fact of the matter is FDA found asbestos in the testing. Two companies that Johnson & Johnson hired found asbestos. How much more testing do our people need? How much more? Enough is enough.

And so I just urge my colleagues to support the chairman as he proceeds to find the truth. And I'll tell you, I've been here—they have every opportunity to bring their own witness forward. I actually went and asked staff who is their witness. They said they don't have one. They had every opportunity, the Republicans, to actually put somebody up here to talk about this.

So I obviously am very passionate about this. I can just tell you, you know, from my district of folks—I have the third poorest congressional district in the country. Very strong, resilient people. They are the people that got targeted by Johnson & Johnson. They're the ones that they thought was disposable for profits. So I'm not going to keep my mouth shut or try to say, well, this ain't fair. No, if the FDA found asbestos, shouldn't that be enough?

Thank you, Chairman.

Mr. KRISHNAMOORTHY. Thank you, Congresswoman Tlaib.

We're just going to go to a second round of questions and then finish up here.

It is true the minority did not call a single witness, whether it was from Johnson & Johnson or anybody. So they had the opportunity and they declined. And, of course, as we know, the CEO has opined on this issue multiple times. He'll go to the media, he'll go in other forums and talk about this, but he doesn't want to talk about it in Congress. And that's a problem.

Now, let me just ask a couple more questions here.

Mr. Etheridge, at the time that you had used Johnson & Johnson's baby powder, did you have any inkling whatsoever about this presence of asbestos in its powder?

Mr. ETHERIDGE. There was no reason for me to suspect this hazard. They're known as the baby company.

Mr. KRISHNAMOORTHY. In fact, they advertise the powder in a way that makes it seem like it's as pure as any—any material out

there, and obviously that's why moms and families apply it to babies, right?

Mr. ETHERIDGE. I used it on my own children.

Mr. KRISHNAMOORTHI. Sure. And I think that—I hear some of my colleagues saying the same thing. And I think generations of families have used it, around the world.

Dr. Longo, you know, I wanted to ask you a little more about your testimony with regard to your own practice. I think the other side wants to make a big deal out of your prior testimony. Would you like to comment on I think their suggestion that somehow your testimony is really motivated by money as opposed to what you've discovered in your scientific testing?

Mr. LONGO. No, our practice is not motivated by money. We do participate in litigation, but our company testifies for both plaintiffs and defendants over the last 30 years.

We have to charge for our time. We have to pay for the electron microscopes. We have to pay for the optical microscopes. We have to pay the rent. I'm not sure a lot of these folks understand what it takes to run a small business.

We go with every type of analysis we do with the utmost integrity. I had no idea back in the day that cosmetic talcs would have this kind of asbestos levels in them. It wasn't until I got interested in it and realized that it was the detection limits that was the problem, that the trace amounts of asbestos in the detection limits was causing every—all the labs that were analyzing it at the time to think there was nothing there.

Using the best detection method, we're now seeing that these accessory minerals—tremolite, actinolite, and anthophyllite—are there. And you can't predict when you'll find it or not. It's almost ubiquitous. The only way to get rid of the problem and to assure, in my opinion, that there is no more exposures to this, is to eliminate talc from these cosmetic products.

Mr. KRISHNAMOORTHI. Okay. Dr. Moline, it's pretty clear that mesothelioma can only be caused by one material, and that is asbestos, correct?

Dr. MOLINE. That's basically true. There's some evidence that folks who have undergone therapeutic radiation may be at increased risk. There's no studies that look at the combination of those two. There are some folks that have had both and is at an increased risk.

In terms of outside products, in the United States, asbestos is the only product that we're aware of that causes mesothelioma, although there is some question of some other minerals like taconite that's found in Minnesota.

Mr. KRISHNAMOORTHI. I see.

Dr. MOLINE. But it's about 99 percent or more.

Mr. KRISHNAMOORTHI. Okay. And, Dr. Metcalf, I think that you talked about the mineral mining, and I think maybe some of my colleagues will talk about this a little bit further. But talc and asbestos are naturally occurring together, correct?

Mr. METCALF. That's correct.

Mr. KRISHNAMOORTHI. It's like you can't mine talc without mining asbestos in the same process?

Mr. METCALF. Well, I did outline a very narrow set of conditions where talc might be produced without—at least amphibole is what I actually—without asbestos. But for most of the geologic settings where talc forms, we very much expect to find asbestos minerals with it, because it is—it is the amphibole minerals that are breaking down to form talc.

Mr. KRISHNAMOORTHY. I see. And in this particular—

Mr. METCALF. And let me add that these processes are taking place at—almost at the atomic scale that these minerals are growing, but we are mining this stuff with drills and front-end loaders and blasting and dump trucks. And so to be able to assure, the way Dr. Longo does, that the material we're mining is free of this, we need to test lots of it, because there's lots of heterogeneities too. We may test one sample and it may be pure talc; we may test another sample and it could be—have asbestos in it. And so it's the heterogeneities that make this a real problem.

Mr. KRISHNAMOORTHY. Very good.

Now I'll recognize Congresswoman Pressley for five minutes.

Ms. PRESSLEY. Thank you, Mr. Chairman.

I want to say I associate myself with the impassioned Detroit tell-it-like-it-is comments of Representative Tlaib a moment ago, and completely dissociate myself with the comments offered by my colleague across the aisle. I find that I have that dual experience often on this committee of comparable pride of our honoring the words of our late chairman in being in efficient and effective pursuit of the truth and simultaneous shame with all of the efforts to obstruct the work of this committee to get to the truth.

But since there was a desire expressed earlier to center the science, I'd like to ask some line of questioning in line with that.

It is reported that Johnson & Johnson's talc tested positive for asbestos as far back as 1957 and 1958. Yet on more than one occasion, labs have tested samples from the same bottle of Johnson & Johnson's talc-based powder and come to different conclusions.

As Representative Tlaib mentioned in her impassioned testimony or statement, Johnson & Johnson commissioned its own studies with samples from the same bottle and predictably announced their samples tested negative for asbestos. Notably, Johnson & Johnson's own commissioned lab also detected asbestos in one of the company's samples, yet later attributed the false positive to environmental contaminants of an air-conditioning unit.

Dr. Longo, how are divergent detection results possible when two samples from the same bottle are tested for asbestos?

Mr. LONGO. If you have trace levels and you are using an unsensitive method, you can have where one sample will be detected and then another aliquot you may not see that. So it's very hard to say, especially if you have a laboratory that did detect it, then didn't detect it. So you can't really compare apples to apples here.

Ms. PRESSLEY. Mr. Metcalf, geologically, how closely related are talc and asbestos?

Mr. METCALF. Very closely related. As I said, many of the reactions that form talc, the metamorphic reactions that form talc, are breaking down amphibole—an amphibole under the kinds of conditions that make them fibrous.

And I'll say, I actually came to this, not—to look at talc not because I was interested in talc, but because I was interested in understanding why amphiboles, which are sometimes fibrous and sometimes are not fibrous, why are they fibrous, what controls it. And as I started to do literature review—and there's a lot of papers published in the seventies and eighties and then in the early nineties that looked at this with high-resolution transmission electron microscopes. And I kept running into textures and understanding that we went from nonfibrous to fibrous amphibole to talc, and it was a reaction sequence that ended in talc.

And that's what really got me interested. And I really wasn't paying attention to the talc stories and any of the stuff until I kept running into this in the literature. And so, yes, asbestos and talc are linked by geologic processes.

Ms. PRESSLEY. And so talc and asbestos evolve from the same protolith?

Mr. METCALF. Yes, that's correct.

Ms. PRESSLEY. Okay. And so what environmental processes caused the protolith to evolve into asbestos and talc?

Mr. METCALF. So the process that's involved in this most of the time, as I talked about, is something called hydrothermal alteration. It's a type of metamorphism when a preexisting rock, the protolith, is subjected to differing conditions of pressure and temperature, and particularly fluid flow. So over the course of the metamorphism, fluids are passing through the rock, and it's the reaction of those fluids with the protolith that drives these processes. All these minerals are hydrous minerals.

Ms. PRESSLEY. So during the rock evolution, asbestos can eventually become talc?

Mr. METCALF. Right. Right. And I'll add one thing is that—again, I said this in my opening statement. We often talk about asbestos as being a contaminant in the talc, as though it were—fell out of an air conditioner, for instance, some foreign body that was introduced. But the reality is, is the way that talc forms, it forms—the road to talc leads through amphiboles and amphibole asbestos. And so it's a relic of the geologic process, not a contaminant from some foreign body.

Ms. PRESSLEY. Okay. So, again, just to be clear—this will be my final question. So is it the case and accurate to say that talc cannot reliably be asbestos-free?

Mr. METCALF. Well, I wouldn't go quite that far. There are some—as I said, there are some reactions that have the potential—and it's been reported that there are asbestos-free versions. There's a mine in Montana. However, I don't think anybody has ever tested it to the sensitivity that Bill Longo has been discussing.

So I think, of the ones that people say are asbestos-free, I think that's not been demonstrated. I think the responsibility is to—is to do the best testing possible and make sure that these things are—are asbestos-free. But I would—I would be surprised if we could find any that's asbestos-free.

Ms. PRESSLEY. Thank you.

I yield back.

Mr. KRISHNAMOORTHY. Thank you, Congresswoman.
And now Congresswoman Tlaib, five minutes.

Ms. TLAIB. Thank you so much, Chairman.

I do want to submit for the record, if there's no objection, a Mother Jones article where it shows that Johnson & Johnson has poured money into directly influencing Federal lawmakers. So far this year, the company has spent \$100,000.

Mr. Chairman, I'd like to submit the article.

Mr. KRISHNAMOORTHY. Without objection, so ordered.

Ms. TLAIB. Also, I'd like to submit a press statement from the Michigan attorney general, Dana Nessel, who announced a \$3 million share of a multistate settlement with Johnson & Johnson and its subsidiary.

According to—is that Okay?

Mr. KRISHNAMOORTHY. Without objection, so ordered.

Ms. TLAIB. Thank you, Chairman.

But according to this statement, it looks like Johnson & Johnson and its subsidiary is to pay over \$3 million for their deceptive marketing of transvaginal surgical mesh devices. The total multistate settlement is nearly \$116.9 million.

I just want to show a pattern of this company. And I know it has—but this is very critically important to show. Now they actually have subsidiaries so that we have to now worry about whether or not in those instances that they're exposing people to devices and to chemicals that are very toxic and harmful.

I know that we've been talking a lot about testing, which I think is really critically important, because it gives credibility to the pastor's claim as well as others who have come forward and said, you know, I'm sick because of being exposed to this product.

In 2009 and 2010, FDA conducted a survey of talc products for asbestos testing. And records show that FDA selected AMA Labs to conduct its testing for all three surveys.

And then just last month, AMA detected asbestos in a sample of Johnson & Johnson's talc powder. In its public—it's called request for quote—solicitation posting for asbestos testing, the FDA stated, and I quote, it is now apparent that detection of asbestos in cosmetics demands using the most sensitive asbestos testing methods available.

Dr. Longo, your lab conducts these kinds of testing. Are you familiar with this at all?

Mr. LONGO. I'm familiar with that—you know, I have a big note that says push talk button.

Ms. TLAIB. Oh, that was me the first month, sir, so don't worry about it.

Mr. LONGO. I'm very familiar with the testing, I'm very familiar with that request for proposal, and I'm very familiar with the detection limits that AMA has for the analysis they did in 2010.

Ms. TLAIB. Yes. So does AMA Labs, the lab FDA has consistently contracted with since 2009, employ what you consider the most sensitive asbestos testing methods available?

Mr. LONGO. No, they're not. Their 2010 work for FDA, their detection limit was approximately 10,000—excuse me—10 million asbestos fibers per gram of talc to find one fiber.

Ms. TLAIB. Wow. Would FDA have detected asbestos in these samples earlier in the time if they used more sensitive detection methods?

Mr. LONGO. In my opinion, yes.

Ms. TLAIB. Is there scientific consensus as to which asbestos detection method is more sensitive?

Mr. LONGO. I believe the consensus would be that the heavy liquid density separation for electron microscopy. It is a standard method now for the International Standards Organization that has a specific section especially for talc using this method that was published in 2014.

Ms. TLAIB. Why is it essential to use the most sensitive methods? I mean, it's clear to me, so we can find it, right?

Mr. LONGO. So you can find it. And also I believe because it's hard to get grasp around the fact that if you have something that's at trace levels, you can still have hundreds of millions of asbestos fibers in there because they're so small and weigh so little.

Ms. TLAIB. And do you believe the heavy liquid density separation method, which we just talked about, is the most sensitive method available? And you're saying internationally that's what's been seen as the process.

Mr. LONGO. Yes, I do.

Ms. TLAIB. So just to get a little bit more deeper—and I can't believe—this is stuff that my son would love, my 14-year-old. This is out of my area. I just know if somebody is harmful, I just want to be able to speak up for them.

But how does the sensitivity of high liquid density separation method detect asbestos in samples that would otherwise test negative for asbestos?

Mr. LONGO. Well, if you have a detection limit of 10 million to 14 million, that would eliminate almost 95 percent of the samples that we found that were positive, if we had to have that detection limit.

The heavy liquid density separation method, we've been able to increase that sensitivity between 2,000 and 3,000 times. That's why we're now seeing what I believe is the reason why people have not been seeing it in the past.

Ms. TLAIB. Okay. Thank you so much, Chairman. I yield the rest of my time.

Mr. KRISHNAMOORTHY. Thank you so much, Congresswoman.

And thank you to all the witnesses for coming here today. Thank you to the audience members for being present for this very important hearing.

I'd like to thank our witnesses for their testimony.

Without objection, all members will have five legislative days within which to submit additional written questions for the witnesses to the chair which will be forwarded to the witnesses for responses. I ask our witnesses to please respond as promptly as you are able.

This hearing is adjourned.

[Whereupon, at 3:28 p.m., the subcommittee was adjourned.]

