

Pub. L. 118-15 substituted “November 17, 2023” for “September 30, 2023”.

§ 300hh-10e. Advisory Committee Coordination

(a) In general

The Secretary shall coordinate duties and activities authorized under sections 300hh-10b, 300hh-10c, and 300hh-10d of this title, and make efforts to reduce unnecessary or duplicative reporting, or unnecessary duplicative meetings and recommendations under such sections, as practicable. Members of the advisory committees authorized under such sections, or their designees, shall annually meet to coordinate any recommendations, as appropriate, that may be similar, duplicative, or overlapping with respect to addressing the needs of children, seniors, and individuals with disabilities during public health emergencies. If such coordination occurs through an in-person meeting, it shall not be considered the required in-person meetings under any of sections 300hh-10b(e), 300hh-10c(e), or 300hh-10d(d) of this title.

(b) Coordination and alignment

The Secretary, acting through the employee designated pursuant to section 300hh-16 of this title, shall align preparedness and response programs or activities to address similar, dual, or overlapping needs of children, seniors, and individuals with disabilities, and any challenges in preparing for and responding to such needs.

(c) Notification

The Secretary shall annually notify the congressional committees of jurisdiction regarding the steps taken to coordinate, as appropriate, the recommendations under this section, and provide a summary description of such coordination.

(July 1, 1944, ch. 373, title XXVIII, §2811D, as added Pub. L. 116-22, title III, §305(d), June 24, 2019, 133 Stat. 941.)

§ 300hh-11. National Disaster Medical System

(a) National Disaster Medical System

(1) In general

The Secretary shall provide for the operation in accordance with this section of a system to be known as the National Disaster Medical System. The Secretary shall designate the Assistant Secretary for Preparedness and Response as the head of the National Disaster Medical System, subject to the authority of the Secretary.

(2) Federal and State collaborative System

(A) In general

The National Disaster Medical System shall be a coordinated effort by the Federal agencies specified in subparagraph (B), working in collaboration with the States and other appropriate public or private entities, to carry out the purposes described in paragraph (3).

(B) Participating Federal agencies

The Federal agencies referred to in subparagraph (A) are the Department of Health and Human Services, the Department of

Homeland Security, the Department of Defense, and the Department of Veterans Affairs.

(3) Purpose of System

(A) In general

The Secretary may activate the National Disaster Medical System to—

(i) provide health services, health-related social services, other appropriate human services, and appropriate auxiliary services to respond to the needs of victims of a public health emergency, including at-risk individuals as applicable (whether or not determined to be a public health emergency under section 247d of this title); or

(ii) be present at locations, and for limited periods of time, specified by the Secretary on the basis that the Secretary has determined that a location is at risk of a public health emergency during the time specified, or there is a significant potential for a public health emergency.

(B) Ongoing activities

The National Disaster Medical System shall carry out such ongoing activities as may be necessary to prepare for the provision of services described in subparagraph (A) in the event that the Secretary activates the National Disaster Medical System for such purposes.

(C) Considerations for at-risk populations

The Secretary shall take steps to ensure that an appropriate specialized and focused range of public health and medical capabilities are¹ represented in the National Disaster Medical System, which take² into account the needs of at-risk individuals, in the event of a public health emergency.

(D) Administration

The Secretary may determine and pay claims for reimbursement for services under subparagraph (A) directly or through contracts that provide for payment in advance or by way of reimbursement.

(E) Test for mobilization of System

During the one-year period beginning on December 19, 2006, the Secretary shall conduct an exercise to test the capability and timeliness of the National Disaster Medical System to mobilize and otherwise respond effectively to a bioterrorist attack or other public health emergency that affects two or more geographic locations concurrently. Thereafter, the Secretary may periodically conduct such exercises regarding the National Disaster Medical System as the Secretary determines to be appropriate.

(b) Modifications

(1) In general

Taking into account the findings from the joint review described under paragraph (2), the Secretary shall modify the policies of the National Disaster Medical System as necessary.

¹ So in original. Probably should be “is”.

² So in original. Probably should be “takes”.

(2) Joint review and medical surge capacity strategic plan

(A) Review

Not later than 180 days after June 24, 2019, the Secretary, in coordination with the Secretary of Homeland Security, the Secretary of Defense, and the Secretary of Veterans Affairs, shall conduct a joint review of the National Disaster Medical System. Such review shall include—

(i) an evaluation of medical surge capacity, as described in section 300hh-2(a) of this title;

(ii) an assessment of the available workforce of the intermittent disaster response personnel described in subsection (c);

(iii) the capacity of the workforce described in clause (ii) to respond to all hazards, including capacity to simultaneously respond to multiple public health emergencies and the capacity to respond to a nationwide public health emergency;

(iv) the effectiveness of efforts to recruit, retain, and train such workforce; and

(v) gaps that may exist in such workforce and recommendations for addressing such gaps.

(B) Updates

As part of the National Health Security Strategy under section 300hh-1 of this title, the Secretary shall update the findings from the review under subparagraph (A) and provide recommendations to modify the policies of the National Disaster Medical System as necessary.

(3) Participation agreements for non-Federal entities

In carrying out paragraph (1), the Secretary shall establish criteria regarding the participation of States and private entities in the National Disaster Medical System, including criteria regarding agreements for such participation. The criteria shall include the following:

(A) Provisions relating to the custody and use of Federal personal property by such entities, which may in the discretion of the Secretary include authorizing the custody and use of such property to respond to emergency situations for which the National Disaster Medical System has not been activated by the Secretary pursuant to subsection (a)(3)(A). Any such custody and use of Federal personal property shall be on a reimbursable basis.

(B) Provisions relating to circumstances in which an individual or entity has agreements with both the National Disaster Medical System and another entity regarding the provision of emergency services by the individual. Such provisions shall address the issue of priorities among the agreements involved.

(c) Intermittent disaster-response personnel

(1) In general

For the purpose of assisting the National Disaster Medical System in carrying out du-

ties under this section, the Secretary may appoint individuals to serve as intermittent personnel of such System in accordance with applicable civil service laws and regulations.

(2) Liability

For purposes of section 233(a) of this title and the remedies described in such section, an individual appointed under paragraph (1) shall, while acting within the scope of such appointment, be considered to be an employee of the Public Health Service performing medical, surgical, dental, or related functions. With respect to the participation of individuals appointed under paragraph (1) in training programs authorized by the Assistant Secretary for Preparedness and Response or a comparable official of any Federal agency specified in subsection (a)(2)(B), acts of individuals so appointed that are within the scope of such participation shall be considered within the scope of the appointment under paragraph (1) (regardless of whether the individuals receive compensation for such participation).

(3) Notification

Not later than 30 days after the date on which the Secretary determines the number of intermittent disaster-response personnel of the National Disaster Medical System is insufficient to address a public health emergency or potential public health emergency, the Secretary shall submit to the congressional committees of jurisdiction a notification detailing—

(A) the impact such shortage could have on meeting public health needs and emergency medical personnel needs during a public health emergency; and

(B) any identified measures to address such shortage.

(4) Certain appointments

(A) In general

If the Secretary determines that the number of intermittent disaster response personnel within the National Disaster Medical System under this section is insufficient to address a public health emergency or potential public health emergency, the Secretary may appoint candidates directly to personnel positions for intermittent disaster response within such system. The Secretary shall provide updates on the number of vacant or unfilled positions within such system to the congressional committees of jurisdiction each quarter for which this authority is in effect.

(B) Sunset

The authority under this paragraph shall expire on March 31, 2025.

(5) Omitted

(d) Certain employment issues regarding intermittent appointments

(1) Intermittent disaster-response appointee

For purposes of this subsection, the term “intermittent disaster-response appointee” means an individual appointed by the Secretary under subsection (c).

(2) Compensation for work injuries**(A) In general**

An intermittent disaster-response appointee shall, while acting in the scope of such appointment, be considered to be an employee of the Public Health Service performing medical, surgical, dental, or related functions, and an injury sustained by such an individual shall be deemed “in the performance of duty”, for purposes of chapter 81 of title 5 pertaining to compensation for work injuries.

(B) Application to training programs

With respect to the participation of individuals appointed under subsection (c) in training programs authorized by the Assistant Secretary for Preparedness and Response or a comparable official of any Federal agency specified in subsection (a)(2)(B), injuries sustained by such an individual, while acting within the scope of such participation, also shall be deemed “in the performance of duty” for purposes of chapter 81 of title 5 (regardless of whether the individuals receive compensation for such participation).

(C) Responsibility of Labor Secretary

In the event of an injury to such an intermittent disaster-response appointee, the Secretary of Labor shall be responsible for making determinations as to whether the claimant is entitled to compensation or other benefits in accordance with chapter 81 of title 5.

(D) Computation of pay

In the event of an injury to such an intermittent disaster response appointee, the position of the employee shall be deemed to be “one which would have afforded employment for substantially a whole year”, for purposes of section 8114(d)(2) of such title.

(E) Continuation of pay

The weekly pay of such an employee shall be deemed to be the hourly pay in effect on the date of the injury multiplied by 40, for purposes of computing benefits under section 8118 of such title.

(3) Employment and reemployment rights**(A) In general**

Service as an intermittent disaster-response appointee when the Secretary activates the National Disaster Medical System or when the individual participates in a training program authorized by the Assistant Secretary for Preparedness and Response or a comparable official of any Federal agency specified in subsection (a)(2)(B) shall be deemed “service in the uniformed services” for purposes of chapter 43 of title 38 pertaining to employment and reemployment rights of individuals who have performed service in the uniformed services (regardless of whether the individual receives compensation for such participation). All rights and obligations of such persons and procedures for assistance, enforcement, and investigation shall be as provided for in chapter 43 of title 38.

(B) Notice of absence from position of employment

Preclusion of giving notice of service by necessity of Service as an intermittent disaster-response appointee when the Secretary activates the National Disaster Medical System shall be deemed preclusion by “military necessity” for purposes of section 4312(b) of title 38 pertaining to giving notice of absence from a position of employment. A determination of such necessity shall be made by the Secretary, in consultation with the Secretary of Defense, and shall not be subject to judicial review.

(4) Limitation

An intermittent disaster-response appointee shall not be deemed an employee of the Department of Health and Human Services for purposes other than those specifically set forth in this section.

(e) Rule of construction regarding use of commissioned corps

If the Secretary assigns commissioned officers of the Regular or Reserve Corps³ to serve with the National Disaster Medical System, such assignments do not affect the terms and conditions of their appointments as commissioned officers of the Regular or Reserve Corps, respectively (including with respect to pay and allowances, retirement, benefits, rights, privileges, and immunities).

(f) Definition

For purposes of this section, the term “auxiliary services” includes mortuary services, veterinary services, and other services that are determined by the Secretary to be appropriate with respect to the needs referred to in subsection (a)(3)(A).

(g) Authorization of appropriations

For the purpose of providing for the Assistant Secretary for Preparedness and Response and the operations of the National Disaster Medical System, other than purposes for which amounts in the Public Health Emergency Fund under section 247d of this title are available, there are authorized to be appropriated \$57,400,000 for each of fiscal years 2019 through 2023.

(July 1, 1944, ch. 373, title XXVIII, §2812, formerly §2811, as added Pub. L. 107-188, title I, §102(a), June 12, 2002, 116 Stat. 599; renumbered §2812 and amended Pub. L. 109-417, title I, §102(a)(2), (4), title III, §301(a), Dec. 19, 2006, 120 Stat. 2832, 2834, 2853; Pub. L. 113-5, title I, §104, Mar. 13, 2013, 127 Stat. 170; Pub. L. 114-113, div. H, title V, §527, Dec. 18, 2015, 129 Stat. 2653; Pub. L. 116-22, title III, §301(a), (d)(1), June 24, 2019, 133 Stat. 931, 933; Pub. L. 117-43, div. D, title I, §3101, Sept. 30, 2021, 135 Stat. 379; Pub. L. 117-70, div. C, title I, §2101, Dec. 3, 2021, 135 Stat. 1504; Pub. L. 117-86, div. B, title I, §1101, Feb. 18, 2022, 136 Stat. 17; Pub. L. 117-103, div. P, title I, §101, Mar. 15, 2022, 136 Stat. 789; Pub. L. 118-15, div. B, title III, §2331, Sept. 30, 2023, 137 Stat. 95; Pub. L. 118-22, div. B, title II, §203(e), Nov. 17, 2023, 137 Stat. 121; Pub. L. 118-35, div. B, title I, §103(e),

³ See Change of Name note below.

Jan. 19, 2024, 138 Stat. 5; Pub. L. 118-42, div. G, title I, § 103(e), Mar. 9, 2024, 138 Stat. 399; Pub. L. 118-158, div. C, title I, § 3103(e), Dec. 21, 2024, 138 Stat. 1764.)

Editorial Notes

CODIFICATION

Subsec. (c)(5) of this section was omitted in light of section 301(d)(3) of Pub. L. 116-22, which provided that the amendment adding subsec. (c)(5) would cease to have force or effect on Oct. 1, 2021. See 2019 Amendment and Termination Date of 2019 Amendment notes below.

AMENDMENTS

2024—Subsec. (c)(4)(B). Pub. L. 118-158 substituted “March 31, 2025” for “December 31, 2024”.

Pub. L. 118-42 substituted “December 31, 2024” for “March 8, 2024”.

Pub. L. 118-35 substituted “March 8, 2024” for “January 19, 2024”.

2023—Subsec. (c)(4)(B). Pub. L. 118-22 substituted “January 19, 2024” for “November 17, 2023”.

Pub. L. 118-15 substituted “November 17, 2023” for “September 30, 2023”.

2022—Subsec. (c)(4)(B). Pub. L. 117-103 substituted “September 30, 2023” for “March 11, 2022”.

Pub. L. 117-86 substituted “March 11, 2022” for “February 18, 2022”.

2021—Subsec. (c)(4)(B). Pub. L. 117-70 substituted “February 18, 2022” for “December 3, 2021”.

Pub. L. 117-43 substituted “December 3, 2021” for “September 30, 2021”.

2019—Subsec. (a)(3)(A)(ii). Pub. L. 116-22, § 301(a)(1), amended cl. (ii) generally. Prior to amendment, cl. (ii) read as follows: “be present at locations, and for limited periods of time, specified by the Secretary on the basis that the Secretary has determined that a location is at risk of a public health emergency during the time specified.”

Subsec. (b)(2). Pub. L. 116-22, § 301(a)(2), amended par. (2) generally. Prior to amendment, text read as follows: “Not later than 180 days after December 19, 2006, the Secretary, in coordination with the Secretary of Homeland Security, the Secretary of Defense, and the Secretary of Veterans Affairs, shall conduct a joint review of the National Disaster Medical System. Such review shall include an evaluation of medical surge capacity, as described by section 300hh-2(a) of this title. As part of the National Health Security Strategy under section 300hh-1 of this title, the Secretary shall update the findings from such review and further modify the policies of the National Disaster Medical System as necessary.”

Subsec. (c)(3), (4). Pub. L. 116-22, § 301(a)(3), added pars. (3) and (4).

Subsec. (c)(5). Pub. L. 116-22, § 301(d)(1), added par. (5), which ceased to have force or effect on Oct. 1, 2021. Text read as follows: “Individuals appointed to serve under this subsection shall be considered eligible for benefits under part L of title I of the Omnibus Crime Control and Safe Streets Act of 1968. The Secretary shall provide notification to any eligible individual of any effect such designation may have on other benefits for which such individual is eligible, including benefits from private entities.” See Termination Date of 2019 Amendment note below.

Subsec. (g). Pub. L. 116-22, § 301(a)(4), substituted “\$57,400,000 for each of fiscal years 2019 through 2023” for “\$52,700,000 for each of fiscal years 2014 through 2018”.

2015—Subsec. (d)(2). Pub. L. 114-113 designated first, second, and third sentences of existing provisions as subpars. (A), (B), and (C), respectively, realigned margins, inserted subpar. headings, and added subpars. (D) and (E).

2013—Subsec. (a)(3)(A)(i). Pub. L. 113-5, § 104(1)(A), inserted “, including at-risk individuals as applicable” after “victims of a public health emergency”.

Subsec. (a)(3)(C) to (E). Pub. L. 113-5, § 104(1)(B), (C), added subpars. (C) and (D) and redesignated former subpar. (C) as (E).

Subsec. (g). Pub. L. 113-5, § 104(2), substituted “\$52,700,000 for each of fiscal years 2014 through 2018” for “such sums as may be necessary for each of the fiscal years 2007 through 2011”.

2006—Pub. L. 109-417, § 301(a)(1), substituted “National Disaster Medical System” for “Coordination of preparedness for and response to bioterrorism and other public health emergencies” in section catchline.

Subsec. (a). Pub. L. 109-417, § 301(a)(2), (3), redesignated subsec. (b) as (a) and struck out former subsec. (a) which related to establishment of position and duties of Assistant Secretary for Public Health Emergency Preparedness.

Subsec. (a)(2)(B). Pub. L. 109-417, § 301(a)(4)(A), substituted “Department of Homeland Security” for “Federal Emergency Management Agency”.

Subsec. (a)(3)(C). Pub. L. 109-417, § 301(a)(4)(B), substituted “December 19, 2006” for “June 12, 2002”.

Subsec. (b). Pub. L. 109-417, § 301(a)(5), substituted “Modifications” for “Criteria” in heading, added pars. (1) and (2), redesignated former par. (2) as (3), and struck out heading and text of former par. (1). Text read as follows: “The Secretary shall establish criteria for the operation of the National Disaster Medical System.”

Pub. L. 109-417, § 301(a)(3), redesignated subsec. (c) as (b). Former subsec. (b) redesignated (a).

Subsec. (b)(1). Pub. L. 109-417, § 102(a)(4), substituted “Assistant Secretary for Preparedness and Response” for “Assistant Secretary for Public Health Emergency Preparedness”.

Subsec. (b)(3)(A). Pub. L. 109-417, § 301(a)(6), substituted “subsection (a)(3)(A)” for “subsection (b)(3)(A)”.

Subsec. (c). Pub. L. 109-417, § 301(a)(3), redesignated subsec. (d) as (c). Former subsec. (c) redesignated (b).

Subsec. (c)(2). Pub. L. 109-417, § 301(a)(6), substituted “subsection (a)(2)(B)” for “subsection (b)(2)(B)”.

Subsec. (d). Pub. L. 109-417, § 301(a)(7), substituted “subsection (c)” for “subsection (d)” in pars. (1) and (2).

Pub. L. 109-417, § 301(a)(6), substituted “subsection (a)(2)(B)” for “subsection (b)(2)(B)” in pars. (2) and (3)(A).

Pub. L. 109-417, § 301(a)(3), redesignated subsec. (e) as (d). Former subsec. (d) redesignated (c).

Subsec. (d)(2). Pub. L. 109-417, § 102(a)(4), substituted “Assistant Secretary for Preparedness and Response” for “Assistant Secretary for Public Health Emergency Preparedness”.

Subsec. (e). Pub. L. 109-417, § 301(a)(3), redesignated subsec. (f) as (e). Former subsec. (e) redesignated (d).

Subsec. (e)(2), (3)(A). Pub. L. 109-417, § 102(a)(4), substituted “Assistant Secretary for Preparedness and Response” for “Assistant Secretary for Public Health Emergency Preparedness”.

Subsec. (f). Pub. L. 109-417, § 301(a)(6), substituted “subsection (a)(3)(A)” for “subsection (b)(3)(A)”.

Pub. L. 109-417, § 301(a)(3), redesignated subsec. (g) as (f). Former subsec. (f) redesignated (e).

Subsec. (g). Pub. L. 109-417, § 301(a)(8), substituted “2007 through 2011” for “2002 through 2006”.

Pub. L. 109-417, § 301(a)(3), redesignated subsec. (h) as (g). Former subsec. (g) redesignated (f).

Subsec. (h). Pub. L. 109-417, § 301(a)(3), redesignated subsec. (h) as (g).

Pub. L. 109-417, § 102(a)(4), substituted “Assistant Secretary for Preparedness and Response” for “Assistant Secretary for Public Health Emergency Preparedness”.

Statutory Notes and Related Subsidiaries

CHANGE OF NAME

Reference to Reserve Corps of the Public Health Service deemed to be a reference to the Ready Reserve Corps, see section 204(c)(3) of this title.

TERMINATION DATE OF 2019 AMENDMENT

Amendment by section 301(d)(1) of Pub. L. 116-22 to cease to have force or effect on Oct. 1, 2021, see section

301(d)(3) of Pub. L. 116-22, set out as a note under section 10284 of Title 34, Crime Control and Law Enforcement.

TRANSFER OF FUNCTIONS

Pub. L. 109-417, title III, §301(b), Dec. 19, 2006, 120 Stat. 2854, provided that: “There shall be transferred to the Secretary of Health and Human Services the functions, personnel, assets, and liabilities of the National Disaster Medical System of the Department of Homeland Security, including the functions of the Secretary of Homeland Security and the Under Secretary for Emergency Preparedness and Response relating thereto.”

Pub. L. 109-295, title III, Oct. 4, 2006, 120 Stat. 1372, provided in part: “That the total amount appropriated and, notwithstanding any other provision of law, the functions, personnel, assets, and liabilities of the National Disaster Medical System established under section 2811(b) [now 2812(a)] of the Public Health Service Act (42 U.S.C. 300hh-11(b) [now 300hh-11(a)]), including any functions of the Secretary of Homeland Security relating to such System, shall be permanently transferred to the Secretary of the Department of Health and Human Services effective January 1, 2007.”

For transfer of functions, personnel, assets, and liabilities of the National Disaster Medical System of the Department of Health and Human Services, including the functions of the Secretary of Health and Human Services and the Assistant Secretary for Public Health Emergency Preparedness (now Assistant Secretary for Preparedness and Response) relating thereto, to the Secretary of Homeland Security, and for treatment of related references, see former section 313(5) and sections 551(d), 552(d), and 557 of Title 6, Domestic Security, and the Department of Homeland Security Reorganization Plan of November 25, 2002, as modified, set out as a note under section 542 of Title 6.

§ 300hh-12. Transferred

Editorial Notes

CODIFICATION

Section, Pub. L. 107-188, title I, §121, June 12, 2002, 116 Stat. 611, as amended, which related to Strategic National Stockpile, was renumbered section 319F-2 of the Public Health Service Act by Pub. L. 108-276, §3(a)(1), July 21, 2004, 118 Stat. 842 and is classified to section 247d-6b of this title.

§ 300hh-13. Evaluation of new and emerging technologies regarding bioterrorist attack and other public health emergencies

(a) In general

The Secretary of Health and Human Services (referred to in this section as the “Secretary”) shall promptly carry out a program to periodically evaluate new and emerging technologies that, in the determination of the Secretary, are designed to improve or enhance the ability of public health or safety officials to conduct public health surveillance activities relating to a bioterrorist attack or other public health emergency.

(b) Certain activities

In carrying out this subsection, the Secretary shall, to the extent practicable—

(1) survey existing technology programs funded by the Federal Government for potentially useful technologies;

(2) promptly issue a request, as necessary, for information from non-Federal public and private entities for ongoing activities in this area; and

(3) evaluate technologies identified under paragraphs (1) and (2) pursuant to subsection (c).

(c) Consultation and evaluation

In carrying out subsection (b)(3), the Secretary shall consult with the working group under section 247d-6(a)¹ of this title, as well as other appropriate public, nonprofit, and private entities, to develop criteria for the evaluation of such technologies and to conduct such evaluations.

(d) Report

Not later than 180 days after June 12, 2002, and periodically thereafter, the Secretary shall submit to the Committee on Energy and Commerce of the House of Representatives, and the Committee on Health, Education, Labor, and Pensions of the Senate, a report on the activities under this section.

(Pub. L. 107-188, title I, §126, June 12, 2002, 116 Stat. 615.)

Editorial Notes

REFERENCES IN TEXT

Section 247d-6 of this title, referred to in subsec. (c), was amended by Pub. L. 109-417, title III, §304, Dec. 19, 2006, 120 Stat. 2859, and as so amended, subsec. (a) of section 247d-6 no longer relates to a working group.

CODIFICATION

Section was enacted as part of the Public Health Security and Bioterrorism Preparedness and Response Act of 2002, and not as part of the Public Health Service Act which comprises this chapter.

§ 300hh-14. Protection of health and safety during disasters

(a) Definitions

In this section:

(1) Certified monitoring program

The term “certified monitoring program” means a medical monitoring program—

(A) in which a participating responder is a participant as a condition of the employment of such participating responder; and

(B) that the Secretary of Health and Human Services certifies includes an adequate baseline medical screening.

(2) Disaster area

The term “disaster area” means an area in which the President has declared a major disaster (as that term is defined in section 5122 of this title), during the period of such declaration.

(3) High exposure level

The term “high exposure level” means a level of exposure to a substance of concern that is for such a duration, or of such a magnitude, that adverse effects on human health can be reasonably expected to occur, as determined by the President, acting through the Secretary of Health and Human Services, in accordance with human monitoring or environmental or other appropriate indicators.

¹ See References in Text note below.