110TH CONGRESS 2D SESSION

H. R. 5809

To amend the Public Health Service Act to authorize the National Institute of Environmental Health Sciences to conduct and coordinate a research program on hormone disruption, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

APRIL 15, 2008

Ms. Slaughter (for herself, Mr. Blumenauer, Mrs. Capps, Mr. Conyers, Mr. Ellison, Mr. Grijalva, Mr. Hinchey, Ms. Jackson-Lee of Texas, Ms. McCollum of Minnesota, Mr. McGovern, Mr. McNulty, Mr. George Miller of California, Mr. Moran of Virginia, Mr. Van Hollen, Mr. Waxman, and Mr. Honda) introduced the following bill; which was referred to the Committee on Energy and Commerce, and in addition to the Committees on Natural Resources and Science and Technology, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

A BILL

To amend the Public Health Service Act to authorize the National Institute of Environmental Health Sciences to conduct and coordinate a research program on hormone disruption, and for other purposes.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,

1 SECTION 1. SHORT TITLE.

- This Act may be cited as the "Environmental Hor-
- 3 mone Disruption Research Act of 2008".

4 SEC. 2. FINDINGS.

- 5 The Congress finds as follows:
- 6 (1) Many compounds found or introduced into 7 the environment by human activity are capable of 8 disrupting the hormone system of humans and ani-9 mals. The consequences of such disruption can be profound because of the crucial role hormones play 10 11 in controlling development and metabolism. Few 12 standardized and validated screens or tests have 13 been developed to routinely and systematically assess 14 chemicals for disruptive effects on hormone systems. 15 Even fewer have statistical power to detect sufficient 16 problems.
 - (2) In the last 30 years, the United States has experienced an increase in the incidence of such human disorders as childhood cancers, testicular cancer, hypospadias, juvenile diabetes, attention deficit disorder and attention deficit hyperactivity disorder, autism, thyroid disorders, learning disabilities, cognitive impairment, and auto-immune disorders. Exposure to hormone-disrupting pollutants may be contributing to these increases. The impact on chil-

17

18

19

20

21

22

23

24

- dren's health as a result of prenatal exposures in particular needs further research.
 - (3) In 2001, the Centers for Disease Control and Prevention's "National Report on Human Exposure to Environmental Chemicals" reported on human exposure to 27 chemicals, and found unexpectedly high levels of certain chemicals used in consumer products. The hazards to humans of these chemicals, singly and in combination, are not well understood.
 - (4) Many wildlife populations have disrupted reproduction or development, including birds, fish, amphibians, and mammals. The effects vary among species, and some are due to exposure to hormone-disrupting substances.
 - (5) Observed disruptions in wildlife include thyroid dysfunction, decreased fertility, decreased hatching success, gross birth deformities, metabolic and behavioral abnormalities, demasculinization and feminization of male organisms, deformation and masculinization of female organisms, and compromised immune systems. If due to exposure to hormone-disrupting substances, then these effects may signal hazards to human health.

- 1 (6) Laboratory studies have corroborated stud2 ies of some effects in wildlife and have identified bio3 logical mechanisms to explain the effects shown. The
 4 chemicals found in wildlife are also found in hu5 mans.
 - (7) Hormone disruption might occur at very low environmental doses, especially when exposure occurs in the womb or immediately after birth, periods during which rapid development is occurring.
 - (8) In 1998, a research committee on hormone disrupters, organized under the auspices of the Office of Science and Technology Policy, concluded that "scientific knowledge is inadequate to fully inform public policy, and a government-wide coordinated research effort that addresses the key scientific uncertainties . . . is needed".
 - (9) In 1999, in response to a request from Congress and funded through the Environmental Protection Agency and the Department of the Interior, the National Academy of Sciences compiled a lengthy list of research, monitoring, and testing priorities related to hormone disruption.
 - (10) The National Institute of Environmental Health Sciences conducts much of the Federal Gov-

- ernment's research on hormone disruption, often working in partnership with other agencies.
- of animal testing to understanding toxic hazards, the
 Congress also recognizes the desirability of speeding
 the use of validated nonanimal screens and tests (to
 reduce animal suffering and to reduce costs) and expediting judgments about hazards from toxic chemicals.
 - (12) The Department of the Interior has considerable experience assessing the occurrence of chemicals in the environment, ecological health, and the hazards to wildlife health and associated human health posed by chemicals in the environment, as a result of monitoring by the Department of the Nation's water resources and wildlife disease, and research by the Department on the effects of chemicals on wildlife.
 - (13) The National Academy of Sciences has recognized the expertise of the United States Geological Survey ("USGS") in such areas as food web contamination and water quality assessment and has encouraged more coordinated work on human health between the USGS and the National Institutes of Health.

1	SEC.	3.	NATIONAL	INSTITUTE	OF	ENVIR	CONMENTAL
2			HEALTH	SCIENCES;	DIR	ECTED	NATIONAL
3			PROGRA	M OF RESEA	RCH	ON HOI	RMONE DIS-
4			RUPTION	١.			
5	;	Subj	part 12 of pa	art C of title	IV of	the Pu	ıblic Health
6	Servi	ce A	ct (42 U.S.C	2. 2851 et seq	(.) is a	amende	d by adding
7	at the	e enc	d the following	ng:			
8	"SEC.	4630	C. DIRECTED	NATIONAL P	ROGI	RAM OF	RESEARCH
9			ON HORM	MONE DISRUE	PTION	١.	
10	•	"(a)	RESEARCH				
11			"(1) IN GE	NERAL.—The	e Dir	ector o	f the Insti-
12	1	tute	shall establis	sh within the	Inst	itute a	comprehen-
13	S	sive	program to-	_			
14			"(A) ca	arry out rese	earch	on the	e health ef-
15			fects on wo	omen and ch	ildre	n that	may result
16			through disa	ruption of the	e hor	mone sy	ystems;
17			"(B) ca	arry out rese	earch,	develo	pment, and
18			demonstrati	ons with res	spect	to tech	nologies to
19			mitigate the	e occurrence	of h	normone	e-disrupting
20			pollutants i	n the enviro	nmer	nt and	their unin-
21			tended effect	ets on ecologi	ical a	and wild	llife health,
22			in cooperati	on with the	Unit	ed Stat	es Geologi-
23			cal Survey	(referred to	in t	his sec	tion as the
24			'USGS');				

1	"(C) coordinate research on hormone dis-
2	ruption in the United States with such research
3	conducted in other nations; and
4	"(D) provide for the dissemination of in-
5	formation described in paragraph (2) to the
6	public.
7	"(2) Issues.—The program established under
8	paragraph (1) shall provide for the following:
9	"(A) Collection, compilation, publication,
10	and dissemination of scientifically valid infor-
11	mation on—
12	"(i) possible unintended human health
13	effects of hormone-disrupting pollutants,
14	with emphasis on exposures to low doses of
15	individual chemicals and chemical mixtures
16	during critical life stages of development,
17	particularly effects of prenatal exposures
18	on children's health;
19	"(ii) the extent of human exposure to
20	hormone-disrupting pollutants, with par-
21	ticular emphasis on exposures during crit-
22	ical life stages of development and in resi-
23	dential and occupational settings; and
24	"(iii) exposure of wildlife species to
25	hormone-disrupting pollutants and possible

1	health effects associated with such expo-
2	sures.
3	"(B) Research, in coordination with the
4	Environmental Protection Agency and the
5	USGS, on mechanisms by which hormone-dis-
6	rupting pollutants interact with biological sys-
7	tems.
8	"(C) Research on improved in vitro, in
9	vivo, and in silico methods to screen and test
10	hormone disruption.
11	"(D) Research on the identity, levels,
12	transport, and fate of hormone-disrupting pol-
13	lutants in the environment.
14	"(b) Director's Duties.—
15	"(1) In general.—The Director of the Insti-
16	tute shall have principal responsibility, in consulta-
17	tion with the Director of the USGS, for conducting
18	and coordinating research on the unintended effects
19	of hormone-disrupting pollutants on human health
20	and the environment.
21	"(2) AGREEMENT.—Not later than 6 months
22	after the date of the enactment of the Environ-
23	mental Hormone Disruption Research Act of 2008,
24	the Director of the Institute and the Director of the

- USGS shall enter into an agreement to carry out the research program established under subsection (a).
- "(3) Transfer of funds.—The Director of the Institute may transfer funds to other Federal agencies to carry out the Director's responsibilities under paragraph (1).
 - "(4) Report.—The Director of the Institute, in consultation with the Director of the USGS, shall make available to the public, every 2 years following the date of the enactment of the Environmental Hormone Disruption Research Act of 2008, a report summarizing findings and conclusions on the extent to which hormone disruption by pollutants in the environment poses a threat to human health and the environment.

"(c) Interagency Commission.—

"(1) ESTABLISHMENT.—The Secretary shall establish a commission to be known as the Hormone Disruption Research Interagency Commission (referred to in this section as the 'Interagency Commission') to advise the Director of the Institute and the Director of the USGS on the development of a comprehensive agenda for conducting research on hormone disruption.

1	"(2) Membership.—The Interagency Commis-
2	sion shall be composed of 14 members, as follows:
3	"(A) The Director of the Institute, who
4	shall serve as the Chairperson.
5	"(B) The Director of the USGS, who shall
6	serve as the Vice Chairperson.
7	"(C) The Director of the National Insti-
8	tute of Child Health and Human Development.
9	"(D) The Commissioner of Food and
10	Drugs.
11	"(E) The Director of the Centers for Dis-
12	ease Control and Prevention.
13	"(F) The Administrator of the National
14	Oceanic and Atmospheric Administration.
15	"(G) The Director of the National Insti-
16	tute for Occupational Safety and Health.
17	"(H) The Administrator of the Agency for
18	Toxic Substances and Disease Registry.
19	"(I) The Director of the Fish and Wildlife
20	Service.
21	"(J) The Secretary of Defense.
22	"(K) The Administrator of the Environ-
23	mental Protection Agency.
24	"(L) The Chairman of the Consumer
25	Product Safety Commission.

1	"(M) The Director of the National Science
2	Foundation.
3	"(N) The Director of the National Insti-
4	tute of Neurological Disorders and Stroke.
5	"(3) Staff.—Each department or agency rep-
6	resented by a member on the Interagency Commis-
7	sion shall provide appropriate staff to carry out the
8	duties of the Interagency Commission.
9	"(4) Recommendations.—Not later than 12
10	months after the date of the enactment of the Envi-
11	ronmental Hormone Disruption Research Act of
12	2008, the Interagency Commission shall recommend
13	to the Director of the Institute and the Director of
14	the USGS a research program, including levels of
15	funding for intramural and extramural research.
16	"(5) Public comment.—The Director of the
17	Institute, through publication of notice in the Fed-
18	eral Register, shall provide the general public with
19	an opportunity to comment on the recommendations
20	of the Interagency Commission.
21	"(6) Report.—Not later than 4 years after the
22	date of the enactment of the Environmental Hor-
23	mone Disruption Research Act of 2008, the Inter-
24	agency Commission shall conduct a review of the

program established under subsection (a) and sub-

- 1 mit a report on the results of such review to the Di-
- 2 rector of the Institute and to the Hormone Disrup-
- 3 tion Research Panel established under subsection
- 4 (e).
- 5 "(7) TERMINATION.—The Interagency Commis-
- 6 sion shall terminate not later than the end of the 5-
- 7 year fiscal period described in subsection (j)(1).
- 8 "(d) Financial Assistance.—The Director of the
- 9 Institute may provide financial assistance and enter into
- 10 grants, contracts, and interagency memoranda of under-
- 11 standing to conduct activities under this section. Research
- 12 conducted pursuant to interagency memoranda of under-
- 13 standing may be conducted through intramural and extra-
- 14 mural agency research programs, subject to appropriate
- 15 scientific peer review.
- 16 "(e) Hormone Disruption Research Panel.—
- 17 "(1) Establishment.—There is established in
- the Institute a Hormone Disruption Research Panel
- (referred to in this subsection as the 'Panel').
- 20 "(2) Duties.—The Panel shall make rec-
- 21 ommendations to the Interagency Commission with
- respect to the duties of the Interagency Commission
- under subsection (c)(1) and advise the Secretary and
- the Director of the Institute with respect to the de-
- sign and implementation of the program under sub-

1	section (a), including preparation of solicitations for
2	proposals to conduct research under the program.
3	"(3) Membership.—The Panel shall be com-
4	posed of the following:
5	"(A) 15 voting members to be appointed
6	by the President, in consultation with the Di-
7	rector of the Institute.
8	"(B) Such nonvoting, ex officio members
9	as the Director of the Institute determines to
10	be appropriate.
11	"(4) Voting members.—Of the 15 voting
12	members of the Panel—
13	"(A) at least 2 members shall be from en-
14	vironmental protection organizations;
15	"(B) at least 2 members shall be from
16	public health and consumer organizations;
17	"(C) at least 2 members but not more
18	than 7 shall be from industry;
19	"(D) at least 1 member shall be from an
20	animal welfare organization; and
21	"(E) a majority of the members shall be
22	selected from among scientists and environ-
23	mental health professionals who—
24	"(i) are not officers or employees of
25	the United States;

1	"(ii) represent multiple disciplines, in-
2	cluding clinical, basic, public, and ecologi-
3	cal health sciences;
4	"(iii) represent different geographical
5	regions of the United States;
6	"(iv) are from practice settings, aca-
7	demic settings, and for-profit or not-for-
8	profit research settings;
9	"(v) have experience in review of re-
10	search on endocrine disruption; and
11	"(vi) possess a relevant advanced de-
12	gree from an accredited college or univer-
13	sity.
14	"(5) Terms.—The members of the Panel shall
15	be appointed for an initial term of 3 years and shall
16	be eligible for reappointment for 1 additional term
17	of 2 years.
18	"(6) Chairperson.—The members of the
19	Panel appointed under paragraph (3) shall elect a
20	chairperson from among such members.
21	"(7) Meetings.—The Panel shall meet at the
22	call of the chairperson or upon the request of the
23	Director of the Institute, but in no case less often
24	than once each year.

1	"(8) Administrative support.—The Institute
2	shall provide administrative support to the Panel.
3	"(9) Termination.—The Panel shall terminate
4	not later than the end of the 5-year fiscal period de-
5	scribed in subsection $(j)(1)$.
6	"(f) Solicitation and Selection of Pro-
7	POSALS.—
8	"(1) IN GENERAL.—Within 15 months after the
9	date of the enactment of the Environmental Hor-
10	mone Disruption Research Act of 2008, and as often
11	thereafter as appropriate, the Director of the Insti-
12	tute shall, in consultation with the Interagency Com-
13	mission, solicit and select proposals to conduct ac-
14	tivities under the program under subsection (a).
15	"(2) Consultation with panel.—In pre-
16	paring solicitations for such proposals, the Director
17	of the Institute shall consult with the Hormone Dis-
18	ruption Research Panel.
19	"(3) Peer review panels.—Before a pro-
20	posal to conduct activities under the program under
21	subsection (a) may be selected by the Director of the
22	Institute, such proposal shall be submitted to, and
23	evaluated by, at least one scientific and technical
24	peer review panel.
25	"(g) Reports.—

"(1) Report upon completion of activities.—Any person who conducts activities under the program under subsection (a) shall, upon completion of the activity, submit to the National Academy of Sciences, the Interagency Commission, and the Hormone Disruption Research Panel a report summarizing the activities and results thereof.

"(2) Report to interagency commission and panel.—The Director of the Institute shall enter into appropriate arrangements with the National Academy of Sciences under which the Academy shall periodically submit to the Interagency Commission and the Hormone Disruption Research Panel a report that evaluates the research activities under the program under subsection (a). The report shall include recommendations to promote the effective transfer of information derived from such research activities. The Director of the Institute shall be responsible for expenses incurred by the Academy in connection with the preparation of such reports.

"(3) Report to congress.—The Interagency Commission, in consultation with the Hormone Disruption Research Panel, shall submit to the Secretary and the Congress—

"(A) not later than December 31, 2011, a 1 2 report summarizing the progress of the research 3 program under subsection (a); and "(B) not later than September 30, 2014, a 4 final report stating the Interagency Commis-6 sion's findings and conclusions on the effects, if any, of hormone-disrupting pollutants in the en-7 vironment on human health and remedial ac-8 9 tions, if any, that may be needed to minimize 10 any such health effects. 11 "(h) Conflicts of Interest.—All grants and con-12 tracts entered into under this section shall include conflict-13 of-interest provisions that require any person conducting 14 a project under this section to disclose any other source 15 of funding received by the person to conduct other related 16 projects. 17 "(i) Definitions.—For purposes of this section: "(1) HORMONE.—The term 'hormone' means a 18 19 substance produced in a cell or tissue that triggers 20 a biological response. Hormone activity may be local-21 ized to the cell in which the substance is produced, 22 or may be in nearby or distant tissues or organs. "(2) Hormone-disrupting.—The term 'hor-23 24 mone-disrupting' means producing effects similar to

those of naturally occurring hormones or interfering

with hormone signaling or hormone interaction with
receptors.

"(3) HORMONE DISRUPTION.—The term 'hormone disruption' means interference with the synthesis, secretion, transport, binding, action, or elimination of natural hormones in the body that are responsible for the maintenance of homeostasis, reproduction, development, function, or behavior.

"(j) AUTHORIZATION OF APPROPRIATIONS.—

"(1) General authorization.—There are authorized to be appropriated such sums as may be necessary for the 5-fiscal-year period beginning with fiscal year 2009 to carry out this section. Amounts appropriated pursuant to this paragraph shall remain available until expended.

"(2) Restrictions on use of funds.—

"(A) Construction and rehabilitation of facilities and equipment.—Not more than 0.5 percent of the funds made available under this section may be used for the construction or rehabilitation of facilities or fixed equipment.

"(B) Administrative expenses of the director.—Of the total amount of funds made available under this section for any fiscal year,

not more than 2 percent of such funds may be used for administrative expenses of the Director of the Institute in carrying out this section.

"(C) Public outreach.—Of the total amount of funds made available under this section for any fiscal year, at least 1 percent, but not more than 5 percent, shall be used for outreach to the public concerning the activities and results of the program.".

 \bigcirc