{York Stenographic Services, Inc.}

HIF112.140

HEARING ON ``THE ENVIRONMENT AND HUMAN HEALTH: HHS' ROLE''

THURSDAY, APRIL 22, 2010

House of Representatives,

Subcommittee on Health

Committee on Energy and Commerce

Washington, D.C.

The Subcommittee met, pursuant to call, at 9:35 a.m., in Room 2123 of the Rayburn House Office Building, Hon. Frank Pallone Jr., [Chairman of the Subcommittee] presiding.

Members present: Representatives Dingell, Shimkus, Buyer, Pitts, Myrick, Harman, Burgess, Blackburn, Barrow, Gingrey, Christensen, Barton (ex officio), Castor, and Sarbanes.

Staff present: Kristin Amerling, Chief Counsel; Ruth Katz, Chief Public Health Counsel; Purvee Kempf, Counsel; Naomi Seiler, Counsel; Elana Stair, Policy Advisor; Allison

Corr, Special Assistant; Greg Dotson, Chief Counsel, Energy and Environment; Melissa Cheatham, Professional Staff Member; Elizabeth Letter, Special Assistant; Earley Green, Chief Clerk; Mitchell Smiley, Special Assistant; David Cavicke, Minority Chief of Staff; Jerry Couri, Minority Professional Staff Member, Environment; Ryan Long, Minority Chief Counsel, Health; Krista Rosenthall, Minority Counsel, Oversight; Aarti Shah, Minority Counsel, Health; and Alan Slobodin, Minority Chief Counsel, Oversight.

Mr. {Pallone.} I call the meeting to order. Today the House Subcommittee is having a hearing on The Environment and Human Health: The Role of HHS, and I will recognize myself for an opening statement.

Mr. {Shimkus.} Mr. Chairman, would you yield for a minute?

Mr. {Pallone.} Sure.

Mr. {Shimkus.} Just parliamentary required. Talking about slippery slopes. I am new in this. When is the Administration or anybody's reports due to us prior to a Congressional hearing? Do you know what the rules say?

Mr. {Pallone.} I am not sure what you are asking me.

Mr. {Shimkus.} When we ask people to testify before us, there is a requirement that they have their written submission so many days in advance or hours in advance. What might that be?

Mr. {Pallone.} I do not know. You are going to have to ask. When witnesses testify, when are they supposed to have their--we will have to find out for you.

Mr. {Shimkus.} Okay. The point being I think that obviously we got one submission at 8:30 last night, and we understand that request to come before Congress is burdensome and you have to run around a whole bunch of traps. But it is

really not fair to our staff who has to read the reports and try to do preparation for their members. In essence, you are condemning them to be here from 8:00 until midnight in preparation for a hearing that starts at 9:30 a.m. And so this will not be the first time it has happened, it won't be the last time. But it is incumbent upon the loyal opposition to raise these issues which I would like to raise.

Mr. {Pallone.} I mean, I will find out when it is supposed to be, but I think we should at least have them at least a day or so beforehand. Otherwise, it is difficult for you.

Mr. {Shimkus.} Well, if you would yield, I know that we got one at 8:30 last night.

Mr. {Pallone.} All right. Well, I apologize for that, and we are going to proceed. But what we will do, we will try to make sure that in the future that we get them further in advance. And I will find out what the official deadline is. But even regardless of the official deadline, I think we should have them a couple days in advance. Otherwise, you can't review them. So we will follow up on that.

Today is Earth Day, obviously a very important day intended to inspire awareness of and appreciation for the earth's environment. It is a day when we call on everyone to do a little something for the planet. It could be as simple

as picking up litter or something more long-term, like planting a tree. And this is the 40th Earth Day, and I reflect not only on the environment but also on the nexus between the environment and human health. It is important to recognize that what we do to our planet can have a direct impact on our health. Initiatives to cleanse our waterways, protect our forests, clean up toxic waste sites not only have a positive environmental effect but they also benefit the health of all Americans. And because of this, the Subcommittee has convened today to discuss the work our federal health agencies are doing with respect to environmental health. Within HHS there are four main bodies that address environmental health issues, the National Institute of Environmental Health Sciences, the National Toxicology Program, the Centers for Disease Control and the Agency for Toxic Substances and Disease Registry. They are all here today to provide the committee with an overview of their efforts.

Environmental health is defined by the World Health Organization as the aspects of the human body, human health and disease that are determined by factors in the environment, and this includes conditions like neurological diseases, cancers and cardiopulmonary diseases that can be caused by events ranging from lead in the drinking water to

air pollution. And I know there are some challenges when it comes to linking environmental hazards with public health events, and I hope to learn more about those challenges today and perhaps even what we might be able to do about it.

A few years back I was made aware of a high incidence of cancer in a town near several Superfund sites in New Jersey. New Jersey has more Superfund sites than any other state. And fearing a connection, the New Jersey Department of Health and Senior Services conducted an investigation into the issue. At the time, the agency found no statistical proof that the rates of cancer were higher in this particular neighborhood than in other areas of the State and could also not make a determination that the diseases were linked to the Superfund sites. So I understand that there are often data challenges when it comes to linking environmental events to public health, and I am eager to hear more about these and similar challenges today at this hearing.

Questions such as how do the agencies look at the relationship between toxic sites and disease outbreaks and what are the barriers to making those determinations, these are the kinds of questions hopefully we can get some answers to.

I am also eager to hear about the research that is currently being conducted on environmental health conditions.

I have a facility in my district that has done a lot of work on this issue. The Center for Environmental Exposures and Disease run by UMD&J, the Robert Wood Johnson School of Medicine and Rutgers University is one of the grant recipients from NIEHS and is doing very exciting work on research, environmental health education and disease prevention, and I am curious to hear from the NIEHS about their priorities for the next few years and how you balance national priorities with research questions that might be more State-specific.

And finally I am very interested in hearing more about how all three agencies work together to try and advance the field of environmental health.

Again, welcome our witnesses. I know that you are doing a lot of very exciting work. Sometimes it may sound bureaucratic, but I want to tell you, when it comes to my state and my district, the work you do--you are called upon constantly. I know I call you on a regular basis to come to New Jersey to check out some of these links between toxic waste and health, which you know, is a major concern and should be a major concern for my constituents and I think all Americans.

[The prepared statement of Mr. Pallone follows:]

146 ********** COMMITTEE INSERT **********

Mr. {Pallone.} I yield to our Ranking Member, Mr. Shimkus, of Illinois.

Mr. {Shimkus.} Thank you, Chairman Pallone. I appreciate this Subcommittee and remain active, but I currently continue to be disappointed that we aren't holding hearings on the implementation of the new health reform law.

In my district, people aren't asking about if a healthy earth means healthier humans or if smokeless tobacco is bad for children. We know it is. People are asking questions on what we have read and being reported on the changes that will come now and in the future with the new health reform law. So why aren't we doing follow up? Was there a drafting error so children with preexisting conditions are not going to be receiving coverage immediately if possible? Is it true those currently in high-risk insurance pools will be stuck paying higher premiums because they don't qualify for the new high-risk pools? Do they really need to be uninsured for 6 months to receive this coverage? If families with low wages are dumped into Medicaid because their employer opted to pay for coverage through the state exchanges, will they have access to the same coverage as those in the exchange? Can they see the same doctors? These are all questions that people are asking and questions that are being reported in the media.

How about this one, for those in the individual market, are their premiums going to rise on average of $2,100 as stated by the CBO and reported in a recent New York Times article?

The health reform law says penalties will occur if you don't have insurance coverage for at least 3 months in the year. Can someone cancel their coverage after 3 months and 1 day and then wait until they get sick to repurchase coverage? Will that mean increases in insurance premiums for those who play fair? Are small businesses going to be able to afford to provide health insurance? Is just 12 percent of the small business population going to benefit in any way from the tax credits as reported by the CBO? Is it true that firms with more than 25 employees will get no tax credit at all? And for those few that qualify, if the credit is only available for 6 years, how do they afford healthcare costs beyond them in the future years?

These are the questions my constituents are asking and questions we as members of the Health Subcommittee should be addressing because some of these problems we can fix now. We can pass a bill and rectify some of these problems we already know that exist on this healthcare bill.

We were supposed to have Caterpillar, AT&T and others in front of the O&I Subcommittee to discuss their financial disclosures and burdens. Last week that hearing was quietly

cancelled. Then next week this Subcommittee was going to address Medicare and Medicaid fraud. That has now been postponed.

Chairman Pallone, I really do want to work with you on evaluating those provisions that we know are bad in this bill that we can fix. I know we are going to have numerous hearings on healthcare issues. I am here to represent my constituents of the 19th district in Illinois, and there is a high level of fear out there of the unknown, and I think our committee could do well in getting some of these questions answered.

[The prepared statement of Mr. Shimkus follows:]

********** COMMITTEE INSERT **********

Mr. {Shimkus.} And with that--

Mr. {Buyer.} Will the gentleman yield?

Mr. {Shimkus.} I would yield.

Mr. {Buyer.} When you mentioned that the O&I Subcommittee was cancelled, was that cancelled--part of that hearing, was it because these corporations are out there, they were talking about what they were going to have to mark down because of their cost in the accounting practices and they were going to challenge them. As it has turned out, what the companies were saying was absolutely true. Under the accounting practices, they are required as a public company to disclose as soon as they learn what their liability is, they must mark that down in that quarter. And so all of these publically traded companies who quickly did an assessment of what the cost would be, billions of dollars now are being marked down against earnings in this quarter. Is that not correct?

Mr. {Shimkus.} That is correct. A lot of these were announced after the passage of the bill. I used actually one of these companies which was Caterpillar on the floor prior to the vote to talk about the cost that would incur. And I think the goal was to bring these CEO captains of industry in here and embarrass them, and I think what is the truth is,

they were just following the SEC code.

Mr. {Buyer.} Would the gentleman further yield?

Mr. {Shimkus.} I would.

Mr. {Buyer.} I notice this week Eli Lilly, which is a very strong corporate partner even in Indiana had to mark down their earnings around 11 or 12 cents and companies all over the country. So when they talked about the cost of this healthcare bill to carry that burden, in fact, it is true. It was a reality. So instead of facing the embarrassment, the Democrat majority cancelled that. Is that not correct?

Mr. {Shimkus.} Well, you would have to talk to Chairman Waxman as far as his intent, but I do know that it was scheduled and it was cancelled.

Mr. {Buyer.} Thank you.

Mr. {Shimkus.} And I yield back my time. Thank you, Mr. Chairman.

Mr. {Pallone.} Thank you. Next is the gentlewoman from California, Ms. Harman.

Ms. {Harman.} Mr. Chairman, I have agreed to let Dr. Christensen go ahead of me.

Mr. {Pallone.} Okay. The gentlewoman from the Virgin Islands.

Mrs. {Christensen.} Thank you, Mr. Chairman, and thank you Chairman Pallone and Ranking Member Shimkus for holding

this important hearing, and it is very appropriate that we are having it on Earth Day. And thank you, Dr. Birnbaum and Dr. Falk for joining our witness panel this morning.

As chair of the Health Braintrust of the Congressional Black Caucus which has as its mission the elimination of health disparities, I have joined now with Jim Clyburn and his Environmental Justice Braintrust over the years on joint conferences around the country to increase the awareness especially in poor, rural communities and communities of color on a nexus between environment and human health. In fact, earlier this week I spent a day-and-a-half on environmental justice tour in South Carolina.

Research has shown us that numerous environmental factors from biochemical hazards and water contamination to unhealthy land uses are among the factors that not only drive and sustain but exacerbate racial and ethnic health disparities. For example, environmental factors are directly linked as causal factors to some of the worst health disparity trends such as childhood asthma, cancer, incidents of mortality that we see in this Nation today. And it should come as no surprise. A 2006 study revealed that racial and ethnic minorities and poor individuals are disproportionately more likely than whites and middle- to upper-income individuals to live near toxic waste facilities. The U.S.

Department of Health and Human Services has long recognized the inextricable link between the environment and human health and has numerous agencies that are directly involved with addressing environmental health issues. I have worked with these agencies and offices in communities in my district, but in the last Administration changes were made and we lost a lot in follow-through. My community and I would imagine other communities were not as well served as before.

So I look forward to this hearing with the National Center for Environmental Health, ATSVR, and the National Institute for Environmental Health Sciences and any other offices, where they stand today, how we work with EPA and other relevant agencies and how from assessments to services to research we are improving the health of people and communities by improving the environments in which too many of them are struggling against the odds to be well.

I yield back my time.

[The prepared statement of Mrs. Christensen follows:]

********** COMMITTEE INSERT **********

Mr. {Pallone.} We thank the gentlewoman. Next is the gentleman from Indiana, Mr. Buyer?

Mr. {Buyer.} I will defer and take the time later.

Mr. {Pallone.} Take the 8 minutes? Okay. Thanks. Gentlewoman from Tennessee? Oh, I guess I am supposed to go back to the Democratic side. Gentlewoman from California, Ms. Harman.

Ms. {Harman.} Thank you, Mr. Chairman, for holding this hearing. Welcome to our witnesses, and happy Earth Day. The 40th anniversary of Earth Day should cause us, as you said, to celebrate the strides we have made in environmental protection and education and to focus on the road ahead.

The earth has a long memory, and one of the results of years of profligate polluting are the hazardous waste dumps now designated Superfund sites. The residents of my Congressional district in Southern California have seen first hand the adverse effects such sites create and understand the very real risks to human health. We have been trying to clean up three Superfund sites that border my district and have affected our residents, particularly minority communities, as Dr. Christensen pointed out, for decades. They are called Del Amo, Montrose, and the Palace Verde Shelf. The Del Amo and Montrose facilities released

substantial amounts of hazardous substances into the soil and groundwater including benzene and DDT. Montrose also dumped DDT through the sewer system into the Pacific Ocean, and this along with PCBs from other industrial sources created the Palace Verde Shelf problem that threatens marine life and human health through contaminated fish consumption. The Montrose site has been paved with temporary asphalt cap to protect workers and to prevent the spread of contaminated soils. Groundwater and soil cleanup plans are in progress.

The Del Amo site, which I know very well, has mostly been redeveloped into an industrial park. The most contaminated section, the waste pits, have been fenced off in a so-called containment zone to prevent further spread into drinking water sources. Because hazardous materials from Del Amo and Montrose are comingled, these sites will be part of the same groundwater remediation effort, but it will take years.

The Palace Verde Shelf cleanup effort is also in progress, and a coalition of local groups have done good work in reaching out to vulnerable communities to educate them about avoiding contaminated fish consumption. However, restoring the area to what it once was remains a monumental task, and EPA still considers the site to be one of the most contaminated in the country.

I would like our witnesses to address their familiarity with these sites and whether they have studied their effects and more broadly hope that they will address what HHS is doing to inform the pubic about the potential adverse health effects.

Thank you, Mr. Chairman, for holding this hearing. There is a lot to celebrate and to be sober about on Earth Day, and I yield back.

[The prepared statement of Ms. Harman follows:]

********** COMMITTEE INSERT **********

Mr. {Pallone.} Thank you. Gentlewoman from Tennessee, Ms. Blackburn?

Mrs. {Blackburn.} Thank you, Mr. Chairman, and welcome to our witnesses.

I will have to say that I am surprised again that this committee is holding a general hearing, this time on environmental health issues that, while they are important, they are not the pressing needs of the day. The link between environmental factors and health is more clearly illuminated by common sense, not Congressional oversight.

Is it lost on anybody in this room that the recent healthcare bill signed into law is destined to restrict access, drive up costs and has so many unknown consequences that we are only starting to uncover the little gems that are hidden in the bill? I know my staff would appreciate sunshine on the status of their health insurance benefits and whether or not they are on the right side of the law because this law was so poorly written. The healthcare law has potentially left Members of Congress and their staff without health insurance. It is disappointing that OPM had to rule on this to validate our insurance as opposed to the law stating the intent explicitly.

I would also appreciate hearing from the drafters of

that fine piece of legislation as to why they and all other federal employees were exempted. What is good for one should be good for all. I think we can agree to that.

The press continues to report the promises of lower health insurance premiums and the healthcare overhaul may not be. They may not take place. So could it be that the bill won't lower cost of insurance and increase access? Certainly there is no public option model that has done that, and you can look at TennCare in Tennessee and Massachusetts Universal Healthcare Plan to prove that point.

I would also like to hear from our governors about the unfunded mandates on their states and how they are going to address the cost of that implementation. And what about the seniors who were told that if they liked their health coverage, they could keep it? We are going to have a lot of angry constituents this October when they learn that their Medicare Advantage plan is dwindling and that they will have to pick up the tab for drugs and medical devices indirectly due to new taxes that are placed on such items.

Mr. Chairman, many pressing issues exist in healthcare today. This committee and the Nation would be better served focusing on new healthcare mandates rather than today's Earth Day hearing.

I yield back.

[The prepared statement of Mrs. Blackburn follows:]

********** COMMITTEE INSERT **********

Mr. {Pallone.} Thank you. Chairman Dingell?

Mr. {Dingell.} Thank you, Mr. Chairman. I want to commend you for holding this hearing. I do want to pause just briefly to observe. I am afraid the distinguished gentlewoman who just preceded me--or I have walked into the wrong hearing? I was under the impression that this was a hearing which related to the important matters of the connection between environmental factors and human health. If I am in error that I am in the wrong room here, I hope that somebody will please inform me.

Mr. {Shimkus.} Will the gentleman yield?

Mr. {Dingell.} I will be happy to yield if--

Mr. {Shimkus.} You can tell by the audience that this is health and the environment, not the healthcare bill. Otherwise, we would have had a line outside stretching overnight. The issue is we have identified problems with the healthcare bill that need to be fixed--

Mr. {Dingell.} Well--

Mr. {Shimkus.} --and we ought to be addressing those versus talking about--

Mr. {Dingell.} I want to thank the gentleman, and I want to tell him how much I appreciate his attempt to assist me. I do observe, however, that he is shedding more

confusion upon me this morning, and it is rather early for me to undergo this kind of confusion.

But having said that, Mr. Chairman, I want to continue by commending you for holding this hearing. It is important for us as a society to have better understanding of the connection between environmental factors and human health. Thirty-five years ago the United States had virtually no laws in place to protect the environment and human health. Private individuals, industry, governments could burn, dump or pump into the air or water or into the ground virtually anything with impunity and without concern as to the consequences to all of us or to the environment.

Some of my proudest achievements during my service in Congress, apart from our legislative health victories which I am happy to see our Republican colleagues are noting, have been the part that I played in writing environmental protection statutes which were of great and landmark importance to our country. These laws weren't just victories just for the environment but they were victories for our health and well-being as a Nation. Therefore, it is fitting that today, on Earth Day, we hear from the Department of Health and Human Services about their role in identifying and preventing health problems caused by our environment. Our society has made enormous strides because of research in this

area. We now know of the dangers caused from contact with asbestos, and we now know that the elevated exposure to lead and mercury can create development problems for children. We also know that air pollution can aggravate asthma. This research has allowed us to take the appropriate legislative and societal actions to reduce illnesses caused by these toxins and others. Yet, there is still much more that we need to know and to learn in order to prevent avoidable illness and death due to environmental factors. According to the World Health Organization, 13 million deaths occur annually from preventable environmental causes.

I want to thank our panel today, Dr. Linda Birnbaum with the National Institute of Environmental Health Sciences and the National Toxicology Program and Dr. Henry Falk with the National Center for Environmental Health and Agency for Toxic Substances and Disease Registry today. Too often we unfortunately only discuss these issues in response to some tragic event, an oil spill or toxic waste leak or something else that jeopardizes life or well being of our people. It is my hope that today’s hearing will lead to a discussion about how the government can continue to proactively lead in research and programming that improves health and well being of the Nation through promotion of a healthy and safer environment.

And again, I do want to welcome our witnesses, and I hope that they are not confused as I have been about the purposes of this hearing. So with that, Mr. Chairman, I thank you and yield back the balance of my time.

[The prepared statement of Mr. Dingell follows:]

********** COMMITTEE INSERT **********

Mr. {Pallone.} Thank you Chairman Dingell. I saw two young girls walk in here, and I was reminded that today is Take Your Daughter to Work Day. So good to see you here, and I hope it is interesting for you.

Next is the gentleman from Texas, Mr. Burgess.

Dr. {Burgess.} Thank you, Mr. Chairman. I am so anxious to get to the testimony of our witnesses I will waive an opening statement.

Mr. {Pallone.} Thank the gentleman. He will have the extra time on questions.

Next is the gentleman from Georgia, Mr. Barrow.

Mr. {Barrow.} I thank the Chair. I cannot possibly improve upon the opening of the Chairman Emeritus, so I too will waive an opening.

Mr. {Pallone.} Thank you. Gentlewoman from Florida, Ms. Castor?

Ms. {Castor.} Yes. Thank you, Chairman Pallone very much for calling this hearing today, and welcome to the witnesses.

I am eager to hear you because nothing is more fundamental to families all across America than clean water and clean air, and it is vitally important that we understand the link between environmental factors and the health of our

families. So I look forward to hearing what the agencies under HHS have to offer in protection and research and guidance, and this is critical. And we need more research. As you know, the EPA has tested approximately 200 of the more than 80,000 chemicals that have been on the market since the Federal Government began to regulate toxic substances 33 years ago. Of those tested, only five are now regulated. So we are dealing at the same time with an update to our outdated TOSCA law. The potential links between chemicals and environmental factors and the Nation's leading chronic illnesses sometimes remain a mystery, and they shouldn't. It is clear that rates of asthma, certain cancers, diabetes, premature births, heart disease and others have increased as the chemical industry has grown. In my community, in the Tampa Bay area in Florida, my neighbors have seen first hand over the years how the presence of toxic chemicals and environmental contaminants can tear apart communities and make people very sick and drastically lower property values.

For example, in 2004 in Plant City, which is on the outskirts of Tampa, residents living in the vicinity of a plant began to notice strange cases of cancer, a real cluster, and gastroenterological issues in the community. After investigation, officials found levels exceeding state and federal standards of arsenic, boron, radium, lead and

cadmium. The Florida Department of Environmental Protection linked the pollution from the plant to at least seven contaminated wells used for drinking water. After the contamination was discovered, the state had to begin providing bottled water for families living in the area.

Families that lived in the area for years believed that the contaminants led to long-term health problems that weren't realized until they left the area, such as fertility problems for women who had lived near the plant as young girls.

Also across the way in 2008, a factory in St. Petersburg was determined to be responsible for a plume of toxic chemicals that migrated to an elementary school and contaminated the ground water there. This time, last year after the pollution problem had been ongoing for 17 years, the factory submitted a plan to the Florida Department of Environmental Protection to finally clean up the contaminants around this facility.

Experts find that areas nationwide which are affected by contamination of rare chemicals are largely communities of color and low-income communities unfortunately. You still have to deal in America with the issues of environmental justice. So I hope you will shed some light on that today.

There are disproportionately high levels of exposure to

toxic chemicals in these areas, and folks in these neighborhoods are getting sick at extraordinarily high rates. So communities and families need talented researchers like you and the folks that you work with to ensure that the air we breathe and the water we drink is safe, is not detrimental to our health.

So again, thank you, Mr. Chairman, for convening this hearing, and thank you to Dr. Birnbaum and Dr. Falk for being here today. This is certainly a topic that we need to continue to learn more about.

[The prepared statement of Ms. Castor follows:]

********** COMMITTEE INSERT **********

Mr. {Pallone.} Thank you. The gentleman from Georgia, Mr. Gingrey.

Dr. {Gingrey.} Mr. Chairman, thank you for holding this hearing today on the potential impact that environmental factors can have on the health of American patients.

For over 30 years I practiced healthcare with a focus on OB/GYN. During those years, I saw firsthand the impact that infertility can have on patients and their loved ones. Data from the CDC's National Survey of Family Growth estimated in 2002 that 7.3 million American women aged 15 to 44 had experienced difficulties conceiving or bringing a pregnancy to term during their lifetime, and additionally 2 million couples in the United States were listed as infertile, that is, not having successfully conceived during the previous 12 months. Although the focus of research and services in this country has traditionally been on women, fertility impairments may be just as common, they certainly are quite common, among men.

To be frank, some of these cases are preventable. The Surgeon General's report on the health consequences of smoking, for instances, highlights numerous adverse reproductive effects of tobacco smoking, including infertility. In women, tobacco smoking is associated with a

decreased probability of conception, ovulatory dysfunction and early menopause. However, these do not alone explain the reasons or solutions for infertility in this country, and therefore, I look forward to exploring these issues with the witnesses and with the committee.

Additionally as an issue that is near and dear to my heart is our nation's infant mortality rate and how our country compares to others. Today we do not have a good understanding of how our numbers compare to other countries, so that data is not very consistent from state to state and region to region. A better understanding of infant mortality numbers in our country might give us a better insight into some of its causes, be they environmental factors or any other contributing issue. Everything from the products that we ingest, the conditions in and around our environment, and the medical procedures or treatments that we subscribe to can have an impact on the mortality rates of our infants. I believe that a consistent understanding of our own mortality rates here in the United States can give us a better understanding of how we compare internationally. We had that debate on the healthcare bill. And if such comparisons were possible, we as a Nation might learn a lot more about the contributing causes of infant mortality and better ensure that parents have the information they need to raise a happy

and a healthy child.

So with these thoughts in mind, Mr. Chairman, as I yield back, I look forward to hearing from our witnesses. Thank you.

[The prepared statement of Dr. Gingrey follows:]

********** COMMITTEE INSERT **********

Mr. {Pallone.} Thank you. The gentleman from Pennsylvania, Mr. Pitts? Will waive? Okay. I think all of our members have had a chance to do an opening statement, so we will move onto our panel and our witnesses. And I want to welcome both of you today. The way we work it, and you probably know, is we have 5-minute opening statements and they are made part of the record, but you may in the discretion of the committee, submit additional statements, brief statements, in writing for inclusion in the record.

Let me introduce each of you. To my left is Dr. Linda Birnbaum who is Director of the National Institute of Environmental Health Sciences and the National Toxicology Program. Welcome. And then there is Dr. Henry Falk who is Acting Director for the National Center for Environmental Health and the Agency for Toxic Substances and Disease Registry.

I have to tell you that the ATSDR is a big deal in New Jersey. I often mention it, and it used to be years ago that people would say, well, what is that? But nobody says that anymore because you are always around, so we appreciate it.

We will start with Dr. Birnbaum.

|

^STATEMENTS OF LINDA BIRNBAUM, DIRECTOR, NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES AND NATIONAL TOXICOLOGY PROGRAM, AND HENRY FALK, ACTING DIRECTOR, NATIONAL CENTER FOR ENVIRONMENTAL HEALTH AND AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

|

^STATEMENT OF LINDA BIRNBAUM

} Ms. {Birnbaum.} Mr. Chairman and distinguished members of the Subcommittee, I am pleased to appear before you on the 40th anniversary of Earth Day to present testimony on the role of NIEHS in understanding the impact of environmental exposures on human health. My name is Linda Birnbaum, and I am the Director of NIEHS which is part of the National Institutes of Health, as well as Director of the National Toxicology Program, which is a cross-agency program involving NIH, CDC and FDA.

NIEHS supports the full range of basic biology to human epidemiology to chemical testing. Our research goes from bench to bedside to public health. It provides information for policymakers who are responsible for decisions affecting public health and for the public who deserve to have the best information on how to prevent disease and dysfunction. We

work closely with other federal agencies, especially CDC, FDA, EPA, OSHA and the Consumer Product Safety Commission and with impacted communities throughout our community-based research programs and outreach efforts required for environmental health, Superfund and children's grants. We collaborate with other NIH institutes on asthma intervention, cancer and autism studies.

Environmental health science is advancing at a tremendous rate. Our understanding of chemical toxicity has been challenged by the new science of epigenetics, which is the study of changes in the packaging of DNA that influence how genes are expressed. Studies indicate that exposures that cause epigenetic changes can affect several generations. This new understanding heightens the need to protect people at critical times in their development when they are most vulnerable.

Related to the field of epigenetics is the key concept of windows of susceptibility. Research shows that the developmental processes that occur at fetal and early-life stages are especially vulnerable to disruption from relatively low doses of certain chemicals. We first saw this in the case of lead which we learned decades ago could harm neurological development as the result of early-life exposure. This concept also applies to hormonally active

agents that disrupt the endocrine system. For example, NIEHS and NTP are funding important studies to fill the gaps in our knowledge about biphenyl A, a widely distributed, high production compound with many uses, including plastics, food can linings, thermal paper and much more. The NTP determined that there was some concern about effects to the brain and reproductive system in fetuses, infants, and children exposed to BPA. We are now supporting an aggressive research effort to fill the research gaps in this area, especially concerning BPA effects on behavior, obesity, diabetes, reproductive disorders, development of prostate, breast and uterine cancer, asthma, cardiovascular disease and transgenerational or epigenetic effects.

In our NIEHS Breast Cancer and Environment Research Program, co-funded with the NCI, researchers are investigating whether periods of susceptibility exist in the development of the mammary gland, when exposure to environmental agents may impact the breast and endocrine system that can influence breast cancer risk in adulthood.

The joint NIEHS/EPA program of 14 Centers for Children’s Environmental Health is expanding into new areas of research including birth defects, childhood cancer including leukemia, diabetes, pubertal development and the developmental basis of adult disease.

Environmental exposures are being implicated in the obesity epidemic. NIEHS is supporting research on the developmental origins of obesity and the theory that environmental exposures during development play an important role in the current epidemic of obesity, and metabolic syndrome and diabetes. Thus, we need to start thinking about obesity not just in terms of genetics and lifestyle but also in terms of how early life exposure to these obesogenic chemicals might be setting the stage for us to gain weight later in life.

Through our Superfund research program, we support research on state and transport of toxic substances and the environment, on new technologies to clean up hazardous waste and on the health effects of Superfund chemicals. This is a problem-solving program that provides information and new technologies to help ATSDR and EPA and the impacted communities do better risk assessments and clean-ups.

The NIEHS Superfund program features many examples of excellent environmental health research with real-world impact. For example, our Superfund grant to New York University includes an outreach program in New Jersey with a major goal of building a partnership between researchers and chromium impacted community members in Hudson County, the majority of whom are Hispanic or African American. Such a

partnership provides a path by which our Superfund researchers can reach communities that are concerned about possible chromium exposure. It is a full partnership in which the community participates in the project from its design through its conclusion.

With our rapidly increasing understanding of the subtleties of biological effects of environmental exposures, we can move forward into an era of a new kind of toxicological testing that is less expensive and time-consuming than our current methods and also gives us an improved understanding of the actual effects on humans. The NTP is laying the foundation for this testing paradigm in partnership with the National Human Genome Research Institute, EPA, soon to be joined by FDA. We are using quantitative high-throughput screening assays to test thousands of chemicals. The resulting data are being deposited into publicly accessible databases. Analyses of these results will set the stage for a new framework of toxicity testing.

In summary, understanding the connection between our health and our environment, with its mixture of chemicals, diet and lifestyle stressors, is no less complex than understanding the intricacies of the human genome. At NIEHS, we remain committed to leading the evolution of the field of

environmental health sciences to meet emerging public health challenges.

Mr. Chairman and members of the Subcommittee, in celebration of Earth Day, I thank you for giving me the opportunity to present testimony on NIEHS' important research activities, and I would be happy to answer any questions.

[The prepared statement of Ms. Birnbaum follows:]

********** INSERT 1 **********

Mr. {Pallone.} Thank you, Dr. Birnbaum. Dr. Falk?

|

^STATEMENT OF HENRY FALK

} Mr. {Falk.} Thank you. Good morning Chairman Pallone and Ranking Member Shimkus and members of the Subcommittee. My name is Henry Falk, and I am the Acting Director of the National Center for Environmental Health at the Centers for Disease Control in Atlanta, Georgia, and Centers for Disease Control and Prevention and the Agency for Toxic Substances and Disease Registry. I am pleased to appear before this committee on Earth Day to discuss CDC and ATSDR's work in addressing environmental health issues. At CDC and ATSDR, Earth Day is not just a day. We try to practice that all through the year. In addition to whatever special events we have for Earth Day, we have an ongoing Sustainability Program and a Chief Sustainability Officer. In our Go Green, Get Healthy Program we try to link environment and health, Go Green, Get Healthy initiatives, and they promote transportation choices such as biking, walking, car-pooling, public transit, making environmentally conscious food choices, conserving natural resources, operations in waste management and exemplifying sustainability, constructing all of our new buildings and facilities. I am very proud to say that our new toxicology and office buildings have lead

certification gold and silver at CDC.

In my dual role with NCEH and ATSDR, I have the opportunity to lead a highly dedicated group of scientists and public health practitioners working to identify and protect from environmental exposures to hazardous substances and seeking to provide answers on a wide variety of other issues related to human health and the environment.

ATSDR is the principal non-regulatory federal public health agency responsible for addressing health effects associated with toxic exposures. The mission is to serve the public through responsive public health actions to promote healthy and safe environments and prevent harmful exposures. We collaborate with other agencies such as EPA and NIEHS. We focus on human health effects issues, try to be of service to all of the communities as Superfund sites, and I may say that in a prior stint as assistant administrator at ATSDR in 1999-2003, visited a number of sites in New Jersey such as the Tom’s River site and actually with the prior Chairman of this Subcommittee, Congressman Bilirakis, spent a number of visits in Tarpon Springs, Florida, the Stauffer Chemical site with Congressman Bilirakis.

The CDC’s National Center for Environmental Health supports state and local governments through programs focusing on healthy homes, specifically related to childhood

lead poisoning, environmental tracking and asthma prevention. We are trying to provide state and local health professionals with training and tools necessary to deal with the broad range of housing-related issues, particularly through our CDC Childhood Lead Poisoning Prevention Program. I was a pediatrician in the Bronx being trained in a residency program during the first Earth Day in 1970. Eight percent of children during the 1970s had blood lead levels greater than 10. Now it is 0.6 percent. So I think we have demonstrated a lot of progress during that time and hopefully continue to achieve that going forward.

I want to mention also our Asthma Control Program which provides funds to state and local governments and territorial programs to conduct activities in support of asthma control. We work very closely with NIH, NIEHS, National Heart, Lung and Blood Institute, a combination of better treatment and better dealing with environmental factors together I think can really make a big difference with asthma.

We have an extensive biomonitoring program and a toxicology laboratory directly measuring chemicals and metabolites in people’s blood and urine, and I think that is very helpful going forward to EPA and others.

So through our work with the environment, we strive to leave a legacy for our children. Many programs have a

particular focus on children including the Childhood Lead Poisoning Intervention Program, ATSDR's site-specific work and childhood asthma interventions. I am a pediatrician by training, part of my personal commitment to improving the environmental health of our children. I have been actively involved in the past and more recently again with the President's Task Force on Environmental Health Risks and Safety Risks to Children which will research and address key children's environmental health and safety issues.

Thank you for the opportunity to provide this testimony to highlight our work in environmental health. I look forward to answering any questions you may have. Thank you very much.

[The prepared statement of Mr. Falk follows:]

********** INSERT 2 **********

|

Mr. {Pallone.} Thank you, Dr. Falk. We will now take questions from the members, and I will start with myself. And I wanted to start with you, Dr. Falk.

I mentioned in my opening statement that making a link between an environmental hazard and the disease outbreak can sometimes be challenging for health agencies. In fact, you mention in your testimony that Tom's River in New Jersey was one of the sites where you were able to make an association between an environmental situation and a disease cluster, but I can think of so many others, you know. The list is endless. I am thinking of the EPA administrator. She was recently at the Ramapo site, you know, where basically an old mine that Ford Motor Company, you know, deposited waste from their auto production and it is, you know, Native American, state-recognized reservation where, you know, every time I go up there, that is all that people talk about, the health impacts. And just recently, in the last week or so, we had our Region II administrator down to the Raritan Slag site which is in my district where there is all this slag from a national lead processing plant was deposited to create a sea wall. And now the beach is closed and of course when I went and we had our community meeting there with the administrator. A significant number of people said, well,

that has been here since 1970. There has been no impact on us, you know. We have been swimming in it all this time. Now you have made it a Superfund site last fall and, you know, a lot people didn't even believe that there was a problem from the health point of view. On the other hand, the regional administrator said it is probably one of the worst examples of, you know, potential health problems that she has witnessed in recent years.

So there is all this controversy and I guess my question is why is it so difficult to prove that a given illness is a result of an environmental incident or situation and what are the barriers to making that determination? And is there anything we can do to improve the situation so it is easier for you to make those connections which oftentimes people think are obvious but don't necessarily come back that way when the ATSDR, you know, investigates it? ATSDR has been involved in all those sites that I mentioned.

Mr. {Falk.} So you are asking a very challenging question. ATSDR is a service agency, and it is very--we have a difficult product to deliver because of the challenges that you mentioned. So you know the volcanoes are in the news lately because of the eruption in Iceland, and early on in my career at CDC I worked at Mount St. Helens. And there was a mountain of ash fall, and it was all very similar substance.

It was right there on the ground. And many people developed asthma as a result of it, and it takes minutes to hours to develop the asthma reaction to the ash fall. It is easy to measure the ash, easy to measure the asthma and the connection occurs in hardly any time at all. So it is easy to establish a relationship in a setting like that.

The challenge for us at many of the Superfund sites is that the exposures may have occurred many years in the past. There are many different chemicals. They are hard to measure. You can't always measure today what might have happened 20 or 30 years ago. On the disease end, some of these chemicals may cause many different types of diseases, and although we have cancer registries, we don't have registries for neurologic or other kinds of diseases that you have mentioned, and the connections may take decades to develop. Early in my career I worked with vinyl chloride. The cancer cluster that occurred among workers took 32 years from when vinyl chloride was introduced commercially until liver cancers were evident in the people.

So these are real challenges. And we can't change the circumstances. All these hazardous waste sites are what they are. They have occurred over time.

I think the ways to improve this are one, better ways to more precisely measure exposures which is what we did in

Tom's River with extensive effort of modeling exposure. I think better ways to actually type and characterize the different kinds of cancers and diseases. You know, people doing therapeutics for drugs are now looking at molecular markers on different types of cancers, and maybe there are ways of better characterizing the diseases that we have to work on so that we can better link more precise estimates of exposure and more precise estimate--

Mr. {Pallone.} Well, let me ask you this because I know my time is running out. Is there anything that we can do? I mean, is it a question of resources? Is it a question of authorization? Is there anything that we in Congress can do to help you better accomplish, you know, this goal of making those links or being able to, you know, investigate health links at these various sites?

Mr. {Falk.} I think the opportunities to actually improve the way we can estimate, measure and model exposures, the better way to track disease and to do more than just cancer and those kinds of things would actually help going forward in the future. We can't change the sites, but the better we can go forward at measuring, monitoring disease, measuring chemicals in people will enable us to do better linkages of those datum.

Mr. {Pallone.} I would just ask you, my time is running

out, but if you can follow up in writing on this I would appreciate it because I mean, I cannot tell you how many times since I have been in Congress or even when I was in the state legislature that we would bring in, and I hope I get the acronym right, ATSDR or the State Health Agency in the case of New Jersey. And it was so frustrating because, you know, people, that was the main concern they had was, you know, what were the health impacts. And then even when remediation is done and you know some of these sites now have been cleaned up since I have been around so long, and you know, people still ask, was it cleaned up to satisfactory rates or levels so that, you know, there isn't a health impact. Because oftentimes what happens is, you know, the sites are cleaned up. I am thinking of the chemical insecticide site in Edison which was the most hazardous waste site in the country and is now a recreation area, you know, like where people play ball. And I am not really getting any complaints there, I should say, anymore.

But it is always a big issue for people in every state. What has happened so far? What is going to happen during clean-up? What is going to happen after clean-up? Because oftentimes they are used for recreational purposes.

Mr. {Falk.} I would be happy to follow up on that.

Mr. {Pallone.} All right. Thank you. The gentleman

from Illinois.

Mr. {Shimkus.} Thank you, Mr. Chairman. If you would hold on those slides first, let me ask these questions.

Folks, Dr. Birnbaum, Dr. Falk, can you tell me what percent of the earth's atmosphere greenhouse gases make up?

Ms. {Birnbaum.} We are not focusing specifically on those issues, but we know the greenhouse gases that exist can have adverse impact on the health--

Mr. {Shimkus.} But you don't know the percentage?

Ms. {Birnbaum.} I do not know the percentage.

Mr. {Shimkus.} Okay. The answer is 2 percent of the earth's atmosphere is greenhouse gases. Ninety-eight percent is nitrogen, oxygen, argon and other gases. Of that 1 to 2 percent of greenhouse gases, do you know what makes up the largest percentage? Ninety-five percent of that 1 to 2 percent is water vapor. Of the 1 to 2 percent of the greenhouse gases that make up the earth's atmosphere, can you tell me what percentage carbon dioxide is?

Ms. {Birnbaum.} No.

Mr. {Shimkus.} It is 3.62 percent. Now of this 3.62 percent, can you tell what makes up the largest percentage of carbon dioxide emissions in the earth's atmosphere? No? The answer is nature makes up 96.6 percent of all carbon dioxide emissions.

How about the percentage of carbon dioxide emissions from humans? If you do simple math, that is 3.4 percent. So humans overall contribute to any greenhouse effect to something like .28 percent of the earth's atmosphere. If we would put the slides up?

[Slide]

Mr. {Shimkus.} They are probably hard to see from there, but the first one has the earth's atmosphere and the little blue slice is greenhouse gases, just greenhouse gases.

[Slide]

Mr. {Shimkus.} The second slide is just the greenhouse gas. So you take that blue and that is magnified by the blue circle, the red part is carbon dioxide, which is 3.62 percent.

[Slide]

Mr. {Shimkus.} So then you take that red slice and you put it into the big circle next to it, 96.6 percent of that is nature, 3.4 percent is humans. So 3 percent of 3 percent of 1 percent is the human involvement in the climate change carbon dioxide debate.

How do you all define hazardous in your research? Or do you when you do research on it? I mean, I am not diminishing the great stuff we have done on lead paint and stuff. When you are doing your research and you are trying to find

something in the groundwater or in the earth, what is hazardous? What compels us to act? Dr. Falk?

Mr. {Falk.} So when we think of things as hazardous, we are a health agency, and we are thinking of things that have potential impact on health.

Mr. {Shimkus.} Right. So I mean, is there like a certain percentage or certain--it probably depends on the element, right?

Mr. {Falk.} Yes.

Mr. {Shimkus.} And how much is ingested by the individual, is that correct?

Mr. {Falk.} Right. And sometimes we have much better information on the relationship disease. Sometimes we are dealing with threats and risks and--

Mr. {Shimkus.} And that can change based upon--

Mr. {Falk.} --dealing with probabilities over--

Mr. {Shimkus.} --as science and research continues.

Mr. {Falk.} Sure.

Mr. {Shimkus.} We can get more information, and there may be other contributing things that we don’t know that work together. Can anyone tell me how much carbon dioxide is hazardous to human health in parts per million? There is a federal standard for that.

Mr. {Falk.} And we are not the ones who set that and--

Mr. {Shimkus.} But as a federal agency that does set that, do you know what that number is?

Mr. {Falk.} I think that these are issues that are under discussion. I do not know the exact number.

Mr. {Shimkus.} My point is I am trying to tie public health to other agencies. The answer is OSHA, which is a minimum standard, is 5,000 parts per million is hazardous to human health. Now, do you how many parts per million of carbon dioxide most of it, 96 percent of it, naturally occurring is in our atmosphere? The answer is 350 to 390 parts per million. So if 5,000 parts per million is hazardous to human health by OSHA standards and the atmosphere has only 350 to 390 parts per million and that is what is viewed as hazardous, and 96 percent of that is naturally occurring, wouldn't it be more a focus on us trying to stop the natural occurring carbon dioxide carbon emissions versus the man-made carbon emission, a cost-benefit return?

Mr. {Falk.} Yes, if I may, maybe I could take one moment just to describe our role.

We are not among the agencies like NOAA and EPA that are actually trying to do all these atmospheric calculations and doing the modeling that would actually predict and model climate change. What we are focused on at CDC and in our program is understanding that there are significant concerns

about this. We are trying to support state and local health departments to assess potential vulnerabilities, to actually measure potential health effects that might be of concern and to think about ways to deal with it.

Mr. {Shimkus.} Right, and I appreciate that. This is our only chance, again, as the minority to address issues. It is Earth Day. Climate change is--I mean, the Senate is going to raise energy taxes in their proposal coming out today. If we go to the last slide, the last one, the connection is this.

[Slide]

Mr. {Shimkus.} The EPA has said that man-made carbon dioxide emissions is hazardous or endangers the public health. Now, you all know the ramifications and issues of public health. Many of us addressing the facts of the atmosphere, the amount of carbon dioxide is naturally occurring, 96 percent, the miniscule amount that is on this next slide, that is just of the carbon dioxide emissions. Now go to the middle one.

[Slide]

Mr. {Shimkus.} That little square goes up to the top. That is the perspective of the entire atmosphere and the carbon dioxide emissions and the man-made which is 1/3 of a 1/3 of a 1 percent. So we have to have our agencies talking,

especially if they are going to make the claim that man-made carbon dioxide emissions endangers public health. And it is so miniscule, it is not even a blip in the atmosphere. This is on Earth Day, Mr. Chairman, and so this is the issue we wanted to address, and I yield back my time.

Mr. {Pallone.} Thank you. The gentlewoman from Florida, Ms. Castor.

Ms. {Castor.} Thank you, Mr. Chairman. You know, when it comes to clean water and clean air and families all across the country just wanting the best for their kids and their parents and grandparents, it is striking to hear the stories here. You know, there is not a colleague here that didn't have a story from back home of some contaminated neighborhood or a Superfund site. You all brought up other examples in your testimony, and you know, it is difficult to pick up the paper every day and not see some other chemical contamination in a community that is causing health problems.

So when I think of folks back home and when they have questions and they see that some of their neighbors are having serious health effects, and maybe they live near a factory, it raises the question of what is that interaction with you all? I mean, I want to ensure that the environmental cops on the beat and the researchers really talk with local communities and neighborhoods. And maybe you

could go through how the Agency for Toxic Substances housed within the CDC and the National Toxicology Program housed at the National Institute of Environmental Health Sciences at NIH connect with local agencies and communities and down to the neighborhood level to get to the bottom of chemical contaminants in communities and potential health risks and how can we further build those connections between your agencies and local health agencies and communities.

Mr. {Falk.} Maybe to start, at CDC especially, and it is just not in the area of environment but broadly, whether it is infectious diseases or occupational health, we work very closely with state and local health departments. It is probably the most significant working relationship at CDC. So there is placement of CDC staff in state health agencies, constant planning with the organizations for the state and local health agencies and very frequent interaction opportunities to inter act with them.

So yes, the state and local health departments are the front line, and we try to be as supportive as we can working with them, and depending on the complexity of the problem, you know, there will be additional federal resources that would actually help.

At ATSDR, we actually have a cooperative agreement program with 30 different state health departments that have

significant numbers of Superfund sites. We provide support to those state health departments to hire professional staff that they could otherwise not have to deal with toxicological questions, environmental health questions, specifically related to Superfund sites. So we do have 30 states where we work directly through staff that are hired through the cooperative agreement program with ATSDR.

So those are our programs working with state and local health people, and it is very important to actually have those people on the ground close to the communities where people have these concerns. But also we try to work very extensively across the Federal Government so we can do maximum benefit in terms of helping people. We work very closely with EPA, for example, at Superfund sites. We have ATSDR staff imbedded in the EPA regional office where they have their Superfund division so they can work closely together. We work very closely with our colleagues at NIEHS, and as Dr. Birnbaum will tell you, they are doing a lot of cutting-edge science on identifying what these chemicals can do, and our hope is to learn as much as we can from Dr. Birnbaum and be able to apply that local situation, utilize that to help state and local departments. So that is a very important working relationship for us.

Ms. {Birnbaum.} So I will pick up on the relationship

between ATSDR and NIEHS. As one of the examples of what we do, ATSDR actually sits as a member of the executive committee of the National Toxicology Program and helps us in deciding which compounds, which kinds of chemicals we should study, how we should study and what it means. Also on the executive board of the NTP sits EPA, OSHA, CPSC, National Cancer Institute--

Ms. {Castor.} Let me ask you. Put yourself in the place of a neighborhood then that, you know, maybe there has been some spill in the community or there is a factory and they are seeing some cases of cancer or in maternal health there have been serious issues. Give us some real-world advice on how right at the community level folks have the concerns that there is something in their water, there is something that they are breathing in the air, how they can-- what steps do they need to take and then where you all play a role.

Ms. {Birnbaum.} Well, in that specific example, for example, we have 14 Superfund research centers which are grantees programs throughout the country. These centers have a community engagement program and work very closely with the community and with for example the state departments of health in order to identify and deal with clean-up issues. We have these types of community engagement programs in all

of our children's health centers, in all of our breast cancer centers and in all of our environmental core centers. In addition, for example, I go out and hold community outreach meetings in different parts of the country, especially in areas where there is a great deal of concern about the environment. So I held one, for example, at Rutgers in the community last fall. I held one, for example, recently in Milwaukee which is an area of the great Rust Belt and huge concerns. I just got back from holding one in West Harlem in New York City to deal with and understand the concerns of the community. When we have issues of concern for example at a specific hazardous waste site, that is specifically the territory of ATSDR, and we work very closely with them. And we serve on some of their boards to help understand what are the chemicals, how can we communicate this information, and then more importantly, what we do is we develop methodologies to help remediate the problem. So we have actually developed, for example, little nanotechnology, nanoparticle impregnated discs that can actually remove volatile organic compounds from groundwater. We have dealt with issues, for example, of mine tailings contaminated with arsenic or other metals where you actually use the phytoremediateion approach and plant certain kinds of--in the desert it is brush--to keep down the mine tailings so they don't blow around and

expose people.

So that will be the kind of thing that is NIEHS' and NTP's responsibility, to respond. We take nominations not only from other federal agencies but also from the communities at large about the things that concern them, and they enter our toxicity testing program as well.

Mr. {Pallone.} Do you want to add to that? I know we are about 2-1/2 minutes over, but I would like you to finish answering the question.

Mr. {Falk.} I was only going to say that for us being involved in those communities when it is important is actually very essential. As Chairman Pallone has said, we don't always have all the answers but being able to be open, transparent and straightforward about it. So I have only been acting in this position for a short time, but in my previous stint at ATSDR, I tried to do a public meeting every month, and I tried to go to the most contentious ones so that we would get the rest of our staff engaged in those communities. And I think it is very important to be as engaged and open as possible.

Mr. {Pallone.} I would certainly agree with that. Thank you. Our Ranking Member of the Full Committee, Mr. Barton, from Texas.

Mr. {Barton.} Thank you, Mr. Chairman. Most of my

questions are going to be directed to Dr. Birnbaum. Was your agency involved with the White House and the EPA on the analysis that led to the endangerment finding of CO2?

Ms. {Birnbaum.} No, we were not.

Mr. {Barton.} Why not?

Ms. {Birnbaum.} Our mission is to study the health effects, and the World Health Organization in 2000 estimated that there were over 160,000 deaths a year from increases in climate change. We know that by some immediate mitigation of some of the things like air pollution we can have immediate tremendous benefits in terms of reducing the mortality and the illnesses associated, for example, with air pollution associated with climate change.

Mr. {Barton.} Well, I will be honest, I am stunned. I know you are telling the truth, so I am not stunned that you are telling the truth, but your mission statement says NIEHS, broad focus on environmental causes of disease make the institute a unique part of the NIH. And then over here it says under the subtopic, climate change and human health, climate change and the actions taken to address it will have significant effects on human health. NIEHS is taking a lead among federal agencies to understand the health effects of climate change and to identify who may be most vulnerable.

We have this major endangerment finding that has huge

consequences for the American economy, and the institute at NIH that is responsible for examining those causes is not involved at all. I mean, I don't understand that.

Ms. {Birnbaum.} Okay. I would like to clarify. We have taken the lead role across the Federal Government in helping to organize the development of a white paper which calls for basically a research agenda on the understanding of what the research should be to understand the health impacts of climate change. EPA was involved but not the group that does the endangerment findings. But EPA was involved along with CDC, NOAA, Department of Transportation, Department of Agriculture and others in the development of this document which lays out in a usable manner the various type of health impacts that can be induced by increase in the climate change, many things that have been identified by the World Health Organization.

Mr. {Barton.} Well, let me ask you. You are a professional toxicologist, I believe. Is that correct?

Ms. {Birnbaum.} Yes.

Mr. {Barton.} So I mean, you know poison. Is that correct?

Ms. {Birnbaum.} I hope it is correct.

Mr. {Barton.} I am not saying you cause poison, I am just saying you know it. Is CO2 a poison?

Ms. {Birnbaum.} Well, at very high concentrations we know at CO2 can actually cause death, but that we are talking about concentrations much, much higher than the kinds of concentrations for which the concern--

Mr. {Barton.} I mean, if I drink a Coke, I drink CO2, don't I?

Ms. {Birnbaum.} Absolutely. CO2 is a natural product, as Mr. Shimkus has mentioned.

Mr. {Barton.} So I mean, in the classic sense, the average person would identify as a poison, CO2 is not a poison?

Ms. {Birnbaum.} Paracelsus taught us in the 1500s that poisons are a matter of both dose and timing and--

Mr. {Barton.} Does CO2 cause cancer? Is there any evidence that CO2 is a carcinogen?

Ms. {Birnbaum.} Not that I know of.

Mr. {Barton.} Okay. And I don't know what the temperature of liquid CO2 is, but if CO2 that we put in a pipeline, there are CO2 pipelines, if there was a rupture in the pipeline and I was standing by the rupture and all the CO2 cam out of that pipeline and I was exposed to it, would that cause any kind of a health effect on me?

Ms. {Birnbaum.} It would depend on the concentration. It could put you to sleep and eventually in fact--

Mr. {Barton.} I mean, it could suffocate me, I guess, and prevent oxygen--

Ms. {Birnbaum.} It could suffocate you. In fact--

Mr. {Barton.} But if I am just exposed to it, it wouldn't impact my health, would it?

Ms. {Birnbaum.} Low concentrations would not impact your health individually.

Mr. {Barton.} So in any normal context, CO2 is not a danger to me as a person?

Ms. {Birnbaum.} We are producing and exhaling CO2 ourselves all the time.

Mr. {Barton.} Exactly.

Ms. {Birnbaum.} Some of the issues about, for example, greenhouse gases that directly affect human health are things like, for example, black carbon which not only raises, you know, increases the temperature but also for example has immediate impacts on human health. And we know that elevated particulate matter, for example, in the air is associated with increased level of illness, cardiovascular disease, pulmonary--

Mr. {Barton.} But CO2 is not particulate matter.

Ms. {Birnbaum.} No, I am talking about other kinds of greenhouse gases.

Mr. {Barton.} My time is expired, Mr. Chairman. I just

think it is unusual that the agency that is responsible for researching and examining the environmental consequences of climate change wasn't involved in the endangerment finding. And I think it is also somewhat enlightening to know that as we normally define a hazardous material or poison, that CO2 is not one. And I want to thank you for giving an honest answer. I won't say it is refreshing because everybody is supposed to be honest, but it is comforting. I wish you the best, each of you the best in your agencies.

Ms. {Birnbaum.} Thank you.

Mr. {Barton.} Thank you, Chairman Pallone.

Mr. {Pallone.} Thank you. I just found out you have an engineering background. I didn't know that.

Mr. {Shimkus.} I do. Old engineering. I am still certified by the State of Texas. I don't use my certification.

Mr. {Pallone.} All right.

Mr. {Shimkus.} I don't want to endanger human health by using that certification.

Mr. {Pallone.} Thank you. The gentleman from Maryland, Mr. Sarbanes.

Mr. {Sarbanes.} Thank you, Mr. Chairman. I appreciate it. I apologize for coming in late. I did look at the testimony that you submitted, and Dr. Falk, I just wanted to

ask you a question. I am the author here of a piece of legislation called the No Child Left Inside Act which is an effort to promote environmental education and in particular, integrate outdoor education and outdoor opportunities for young people across the country as part of developing environmental literacy. We have had hearings which testify to the instructional benefit of this kind of education to the economic opportunities through career paths that are formed when young people are exposed in that way to obviously the benefit of raising their awareness of the environment, which helps all of us. But there was also very strong testimony about the public health benefit of getting children outdoors more active and really integrating that into the instructional program and also then modeling for parents and for partnering with parents and families how you just promote an active and healthy lifestyle.

And so I was intrigued by this healthy community design concept that CDC is developing and strengthening, and you gave examples of safe routes to school programs and described them as safe opportunities for physical activity as they go to and from school. And I just wondered if you could speak to that a little bit more. I have talked to some of the folks in school construction, for example, about integrating into the future design of schools and renovations of schools

the concepts of outdoor classrooms and other opportunities for students to kind of take ownership of the environment in the immediate vicinity of their school and so forth. And I was just curious your perspective on the extent to which an effort like No Child Left Inside promotes that kind of outdoor educational opportunity can align with the healthy community design approach that CDC has developed.

Mr. {Falk.} I think it is a very strong connection with what you raised and kind of what we are thinking.

You know, there are traditional environmental issues such as specific chemicals and how they affect people, but increasingly as we see the environment broadly, the impact of how the environment has been built, changes that have occurred over time, children's ability to be out and do things has really been impacted tremendously by how we have structured our world over the last 10, 20, 30 years. And I used to walk to school 30 minutes every day. My children never dreamed of that.

So we think it is very important to actually look at how we have designed our homes, our communities, our schools and how we can think about these in a way that would promote healthy behaviors, as well as an appreciation of the environment. So Safe Routes to School, we think about that. We think about walking, biking trails and ways in which

people can enjoy the outdoors. And I mentioned also in testimony the President's Task Force on Children's Environmental Health. There will be an opportunity to actually really discuss these issues and to be able to make further advances in these efforts, and you are very correct that education is a very important part of that, both the environment of the schools itself but what we are actually teaching children about their environment and the outdoors.

So that is a very important issue to us, and I hope that we are receiving--well, in the President's budget for fiscal year 2011, there is an element for community design, and I know that issues related to education and the environment, health impact assessments of the environment are all very important to us.

Mr. {Sarbanes.} Well, that is great to hear. I mean, in a sense, if we can inculcate as the norm this idea of getting kids outdoors, we don't want to have a situation of, you know, they are all dressed up with no place to go, right? And so the healthy community design will help ensure that when they are ready to go out into that outdoors and engage, that we have designed those opportunities in a way that really maximizes what is available to them.

Mr. {Falk.} I think I also mentioned in testimony that last week at the White House there was the Conference on

America's Great Outdoors which I think deals more broadly with conservation and the broader outdoor environment. But I think that is another avenue for bringing together federal agencies to actually focus on the outdoor issues.

Mr. {Pallone.} Thank you. Next is the gentleman from Texas, Mr. Burgess.

Dr. {Burgess.} Thank you, Mr. Chairman. Dr. Falk, you mentioned when you were discussing with Mr. Pallone a lack of disease registries, specifically those covering neurological diseases. There is a bill that has been introduced, H.R. 1362, to create a registry for MS, Parkinson's and other neurological disorders. Can I assume then by your answer to Mr. Pallone's question that you are in support of that and you would encourage Chairman Pallone to bring that bill to the Subcommittee for a markup? The witness answered yes for the record.

I am going to ask a series of questions that may seem off-topic on Earth Day, but we get so little chance for oversight of federal agencies on this committee, and it is really a shame because this committee should be the primary committee for oversight, perhaps not this Subcommittee but the Subcommittee on Energy and Commerce.

But let me ask a couple of questions related to, Dr. Birnbaum, Title 42, salaries and Title 42, appointments. Are

you familiar with those?

Ms. {Birnbaum.} We have several.

Dr. {Burgess.} An it seems that our committee staff has received information from inside the institute that the National Institute of Environmental Health may not be using Title 42 special pay mechanisms according to the regulations and guidelines. Now, as I understand Title 42 regulations, they allow you to pay outside of the traditional pay guidelines for someone with special expertise who will provide special services, is that correct?

Ms. {Birnbaum.} It is outside of the regular, normal GS pay scale and requirements, and it is a very special program and it is a very complex program with many different sub-programs within it.

Dr. {Burgess.} And typically, though, those individuals who are hired under Title 42 would go through a review process, a peer review process, to receive that designation?

Ms. {Birnbaum.} That is my understanding since I have been at the institute. You know, I have been there for 15 months now. Every hire that might be a Title 42 goes through extensive hiring process that not only goes through processes at our institute but goes through central panels at NIH.

Dr. {Burgess.} How many hires under Title 42 provisions in the last 15 months? Would you be able to put a number to

that or is that something you would need to check and get back to us on?

Ms. {Birnbaum.} I would have to check and get back to you, but it has been very few.

Dr. {Burgess.} Few like under 12, few like under 50?

Ms. {Birnbaum.} Definitely way under 12.

Dr. {Burgess.} Okay. But again, there is at least a perception and it comes from the NIEHS that it may be more of a routine practice than something that is used under exceptional circumstances, and while that may be an internal problem within the institute, it is something that should interest members of this committee that the Title 42 provisions are being appropriately applied and the conditions are being followed.

Ms. {Birnbaum.} I will be happy to look into it, but I didn't know that this was a concern since I have been at the institute.

Dr. {Burgess.} Are you approving Title 42 conversations for higher salaries based on job title or does that require a pay committee to provide a recommendation?

Ms. {Birnbaum.} The pay committee has to provide recommendations, and there is a very extensive documentation that is required.

Dr. {Burgess.} Let me just ask this question. Are you

employed under Chapter 42 provisions?

Ms. {Birnbaum.} Yes, all institute directors are.

Dr. {Burgess.} Can I ask what your salary is?

Ms. {Birnbaum.} I guess so.

Dr. {Burgess.} I would ask what your salary is.

Ms. {Birnbaum.} It is $230,000 a year.

Dr. {Burgess.} Okay. And prior to coming to the National Institute of Health, public records of your salary at EPA, $158,000 according to what I have been able to find. Is that accurate?

Ms. {Birnbaum.} That sounds right. I was in the senior executive service.

Dr. {Burgess.} Now, in March, Director Francis Collins-- and I have the absolute utmost respect for Dr. Collins and I think he is the right man at the right time in the right place--he stated that the Obama Administration has made it clear that cancer and autism ought to be priorities for medical research and that we totally agree, we meaning Dr. Collins and the NIH. Now, currently, for issues related to climate change, what is the funding level?

Ms. {Birnbaum.} It is a very complex issue. One of the analyses suggest that maybe at all of NIH as much as I think $300 million. Others suggest it is only about $1.5 million. And it depends upon whether you count on the research that

might be related to effects of climate change but wasn't directly tied to it, that is the first figure, versus the studies that have just been, most of them just recently initiated with funding through the stimulus package where we actually ask for grants that would directly look at the relationship.

Dr. {Burgess.} Yeah, we will get to the stimulus package in just a second if I have time. My figure actually falls in between those two that you gave, so it must be accurate, $200 million. But currently the figure that I have for autism is $188 million. Is that a correct number?

Ms. {Birnbaum.} And that is for the entire NIH. That sounds like it is in the ballpark.

Dr. {Burgess.} So Dr. Collins said the highest priority is cancer and autism for medical research, yet funded science for climate change actually outstrips that for funding for autism ate the present time.

Ms. {Birnbaum.} As I said, part of that has to do with the way that our system counts work, and when it includes the $200 or the $300 million figure is counting for all the work for example that might be related to the impacts of air pollution, the impacts of heat, the things that can happen when infectious disease patterns change as the climate rises and so on. But many of those were not directly related to

climate change.

Dr. {Burgess.} On the stimulus bill which you referenced a moment ago, my figures are that your institute received $187 million from the American Recovery and Reinvestment Act. How have these funds been allocated to climate change related activities?

Ms. {Birnbaum.} The climate change activities that we funded were actually funded through the common fund that the director of NIEHS had held back $200 million from the amount, the rest of the $10.4 billion that was allocated, and that was what was called the Challenge Program. And through the Challenge Program NIEHS funded two grants, one dealing with the direct effects of heat waves on health and one dealing with the increase in forest fires and what that would do in terms of cardiovascular respiratory disease. The total amount of challenge grants that were funded on climate change under the Challenge Grant Program was about $1.3 million in fiscal year 2009.

Dr. {Burgess.} Can you tell us how many jobs were created under the climate change funding that was provided to your institute?

Ms. {Birnbaum.} I can get you that information. Under our $187 million, we know that at least 400 jobs, new jobs, were created.

Dr. {Burgess.} And of the $38 million total that was received by NIH, how much of that was received by your institute, specifically for climate change activities?

Ms. {Birnbaum.} Well, as I said, we funded two grants under climate change that came from this $200 million. So it is a very small percent of the total budget. I think one thing that is important is this white paper, this cross-agency white paper that has just been released which identifies and provides a roadmap for the research needs related to health impact of climate change will help us as we go forward to better understand the health impacts.

Dr. {Burgess.} Again, just for the record, tell me the number of jobs that your institute created as a result of the climate change funding in the stimulus bill?

Ms. {Birnbaum.} I can’t give you exactly the number, but it would be--I don’t have that number. I know how many the whole $187 million created, and that was approximately 400 new jobs. Now, those numbers are based upon what our grantees tell us the number of jobs that they created.

Dr. {Burgess.} So $.5 a million a job?

Ms. {Birnbaum.} That would be--that does not include, and I think it is important to realize, all the jobs that in addition, jobs that weren’t lost, for example, that would have been lost.

Dr. {Burgess.} Okay, so we are in the created or saved category now that Vice President Biden talks about. If you would get us the number, if you could. If you would get us that number from your institute--

Ms. {Birnbaum.} I will get you--

Dr. {Burgess.} --I think that would be helpful--

Ms. {Birnbaum.} --for our two climate change grants how many jobs the grantees told us that that created.

Dr. {Burgess.} That would be great. Thank you, Mr. Chairman. I will yield back.

Mr. {Pallone.} Thank you. Gentleman from Georgia, Mr. Gingrey.

Dr. {Gingrey.} Thank you, Mr. Chairman. Dr. Birnbaum, how important do you think it is to base policy decisions on strong science? Let me repeat that. How important do you think it is to base policy decisions on strong science?

Ms. {Birnbaum.} I think strong science input into policy is extremely important.

Dr. {Gingrey.} Dr. Falk?

Mr. {Falk.} I can't even imagine the reverse, basing policy decisions on poor science. I mean, I totally agree with that statement.

Dr. {Gingrey.} Recently the Yucca Mountain Nuclear Waste Repository was cancelled. Do you know, either one of

you, do you know of any federal health-based science research studies on which this decision was based or any safety studies? Are you aware of either?

Mr. {Falk.} I don't think that we at CDC were ever engaged in that process on Yucca Mountain, so I don't actually know that in any kind of detail.

Dr. {Gingrey.} Dr. Birnbaum, do you have any knowledge of whether or not the decision was based on any federal health-based science research studies or safety studies?

Ms. {Birnbaum.} I don't know of that.

Dr. {Gingrey.} Either one of you really have any knowledge of why the Yucca Mountain Nuclear Waste Repository was cancelled after getting so close to completion and I don't know how many--

Ms. {Birnbaum.} We were never consulted.

Dr. {Gingrey.} You weren't involved in that? Okay. Dr. Birnbaum, you testified that new understanding heightens the need to protect people at critical times in their development, and you presented actually a range of newly understood risk to DNA and the like. What is the bottom line in your view? Are we healthier now than we were 50 years ago or not? And if you could elaborate on that and maybe provide some data, I would appreciate it.

Ms. {Birnbaum.} Well, I think that infectious diseases

have been a success story over the last century, that basically many of the diseases that people died from in the past we have been able to allow people to live longer, healthier lives. However, the increase in chronic diseases certainly has been dramatic over the past century and continues. The very, very rapid increases in the health conditions such as diabetes, autism, ADHD, for example, are all issues that have occurred so rapidly, and I think most scientists would agree that studies clearly show that it is just not a matter of diagnosis but is in fact an actual increase that it can't be changed just in our genes. It has to be a change in our environment. And I think we are beginning to understand that complex diseases in all cases are going to reflect an interaction between genes and our environment. So for things like autism, for example, and ADHD as just two examples, the increases in those again have occurred so rapidly, CDC in fact has recently come out with new information which demonstrates that now 1 in every 110 children is diagnosed with an autism spectrum disorder. That again is happening too quickly. The issue of some of the new understandings that during development, the expression of genes change, and if you alter that expression of genes at critical times, in fact, you can never recover from that insult. So I think those are the important--

Dr. {Gingrey.} Yeah. Well, let me just say that I think the answer to that question is that we are healthier today than we were 50 years ago. Certainly there are more chronic diseases, but of course, people are living longer and they are developing osteoporosis and obesity and a number of things that may very well be related to their own behavior or lack of it, personal responsibility.

Let me go onto my last question because we don't have much time. I don't have much time at this point. And I want this to be a series of yes and no, so just simply answer yes or no. I would like for both of you to do this. Do you believe that good science includes relevant, verifiable measurements with sufficiently small error rates? Would you agree with that, yes or no?

Ms. {Birnbaum.} Yes.

Mr. {Falk.} Yes.

Dr. {Gingrey.} Do you believe that good science includes controlled measurements whose interpretation is not authored by outside influences?

Ms. {Birnbaum.} Yes.

Dr. {Gingrey.} No trick questions here. Thank you. You both say yes. Do you believe that good science contains results that are repeatable by independent scientists? Dr. Falk is shaking his head yes. Dr. Birnbaum?

Ms. {Birnbaum.} The answer is if they truly try to repeat the study.

Dr. {Gingrey.} Yes, and assuming they did. So the answer from both of you is yes. And finally, do you believe that regulatory policy in the United States, things that we do, to the extent that it is going to rely on scientific research should, at a minimum, make these criteria that you have agreed to, we just mentioned, the cornerstone of our policymaking?

Ms. {Birnbaum.} Yes.

Dr. {Gingrey.} Dr. Falk?

Mr. {Falk.} Yes, sir.

Dr. {Gingrey.} Thank you all very much. And for the record, in case you couldn't hear, the answer to all those questions is yes. Mr. Chairman, thank you for your indulgence. I know I am a little bit over, and I yield back.

Mr. {Pallone.} Thank you. The gentleman from Pennsylvania, Mr. Pitts has 8 minutes.

Mr. {Pitts.} Thank you, Mr. Chairman. I apologize. I had to step out for a few minutes. I hope I don't ask you about what you have already spoken.

Dr. Birnbaum, you testified that new understanding heightens the need to protect people at critical times in their development, and you presented a range of newly

understood risks to DNA and the like. Are we healthier today than we were, you know, 50 years ago in your opinion? What is the bottom line?

Ms. {Birnbaum.} More people are living longer.

Mr. {Pitts.} And how do the new health risks that you have talked about compare with the risks that contribute to disease and development 50 years ago, for instance?

Ms. {Birnbaum.} Some of the new understanding is making is clear that exposures or effects in early life can lead, be associated with, the increase in chronic disease that we are seeing. So studies have clearly shown that, for example, some under-nutrition, not necessarily starvation, but under-nutrition or stress can be associated 40, 50, 60 years later with an increase in obesity, diabetes, cardiovascular disease and cancer.

Mr. {Pitts.} Now, you talked about risks with environmental toxins. Are you studying naturally occurring toxins as well? Have you examined whether there are more natural or more man-made toxins in the environment?

Ms. {Birnbaum.} Under the NTP, we have actually studied over 2,700 individual substances, and included in that list are at least 100 to maybe more natural products.

Mr. {Pitts.} And should we be concerned with these natural--

Ms. {Birnbaum.} Some of those products are carcinogenic.

Mr. {Pitts.} And what kind of priorities do you place on research to identify to show the health improvements from reductions in the toxins you identify?

Ms. {Birnbaum.} Much of the research that we do is driven by the nominations that we get and is also by the priorities, trying to understand and look at things that are either highly toxic or things that can have the opportunity to impact large numbers of people. So we talk about very often how broad is the exposure, and that is often a determinant of whether we study a chemical in detail or not.

Mr. {Pitts.} Now, one of the quotes in your testimony you said the Center for Children's Environmental Health actively support the engagement of new community groups involved with children's health issues. What do you mean by that statement?

Ms. {Birnbaum.} Okay. We have 14 children's health centers that we co-fund with EPA, and these centers, in addition to having all the scientific parts which involves basic research and some human studies, also involve a community outreach group. For us to go into a community and work in a community, we need to have the citizens of that community involved from the start of the studies to the

completion and then help us in the development of materials that can be used to help communicate what we learned.

Mr. {Pitts.} Now, are some of these groups advocacy groups?

Ms. {Birnbaum.} Some of the community groups are advocacy groups.

Mr. {Pitts.} And what kind of advocacy do you support?

Ms. {Birnbaum.} Well, for example, the We Act group in New York City which is involved with our Columbia's Children's Health Center is very involved. For example, they have played a major role in helping New York deal with issues of, for example, waste transfer stations, diesel exhaust, developing of parks and so on.

Mr. {Pitts.} Okay. Thank you. Dr. Falk, in your opinion, is our environment in better shape today than it was 50 years ago?

Mr. {Falk.} I think we actually have made great strides in the last 50 years.

Mr. {Pitts.} And are we healthier today in your opinion than we were 50 years ago? To what extent, you know, as technological advances occur, innovation, have that contributed to our health?

Mr. {Falk.} Yeah, in many ways we have improved significantly as Congressman Gingrey said before. Heart

disease rates are coming down, longevity goes up. But there are clearly concerns such as increase in rates of obesity in children and actually how to weigh those in terms of--I wish CDC had a health index that we measure week to week how the Nation's health would go. But that is a complicated thing to put together. So yes, we have made tremendous advances in many chronic diseases. That is not to say there aren't worrisome issues that come up.

Mr. {Pitts.} In terms of threats to the environment, does CDC examine environmental and human health in the context of economic well being of people?

Mr. {Falk.} In context of, excuse me?

Mr. {Pitts.} Economic well being of people and communities?

Mr. {Falk.} Well, I think what happens is that in many of the places where we work, such as at ATSDR working at Superfund sites, many of those sites are in areas where people are economically disadvantaged or impoverished. So inevitably that happens, and it is a challenge for them and for us. And so it compounds the issues that we have to deal with when we speak with them. They often don't have adequate healthcare, and they are concerned about healthcare for their exposure with chemicals and so on. So there are ways in which I think the economic difficulties of people around

Superfund sites compound the scientific and environmental issues.

Mr. {Pitts.} What role does economic well being have on the ability to prepare for climate change, for instance, be it natural or man-made? Will CDC study that?

Mr. {Falk.} In terms of climate change?

Mr. {Pitts.} Yes.

Mr. {Falk.} We have a program that the appropriation is roughly $7.5 million, and our role is particularly to work with state and local health departments and others to understand local vulnerabilities that might appear from changes in the climate, establish surveillance so those things can be tracked. For example, communities which have had issues with heat-related mortality and illness in the past, to be able to track that as a change and to understand how do you measure that and how one might mitigate that if that increased in the future.

Mr. {Shimkus.} Will the gentleman yield on that real quick?

Mr. {Pitts.} Yes.

Mr. {Shimkus.} Are you also looking at cold-related injuries--

Mr. {Falk.} Cold-related?

Mr. {Shimkus.} --in response to--I mean, there is an

argument. Heat-related injuries may go up, cold-related injuries may go down. So hopefully you are looking at the benefits and the disadvantages if you are focusing on one health-related event.

Mr. {Falk.} I think in one sense, we actually look at the final common denominator. If the heat is increasing, what is that doing to the health of people? We try to work with other agencies such as energy, transportation--

Mr. {Shimkus.} No, but, come on. You got to be fair, here. If you are looking at the negative effects on health because of heat increases, you have to look at the positive effects if there are cold-related injuries or diseases or deaths, and that is mitigated by a warming climate. You can't--

Mr. {Falk.} You said cold? Did you say cold, c-o-l-d?

Mr. {Shimkus.} Yes.

Mr. {Falk.} Okay. I am sorry. Yes, that is an important issue. We understand that. And we--

Mr. {Shimkus.} Well, I don't think the Administration does.

Mr. {Falk.} Yeah.

Mr. {Shimkus.} So I would applaud you if you are making sure that there is a fair--

Mr. {Falk.} We have--

Mr. {Shimkus.} --look at the cost benefit and disadvantages of any effective climate change. I am sorry to take the gentleman's time.

Mr. {Pitts.} Thank you. My time is expired. Thank you.

Mr. {Pallone.} Thank you. The gentlewoman from North Carolina, Ms. Myrick.

Mrs. {Myrick.} Thank you, Mr. Chairman. Thank you both for being here, and I am sorry I missed your opening testimony. I am very glad, Dr. Birnbaum, that you are in North Carolina. We are happy to have your agency there, no question about it.

I wanted to ask you a question about the Breast Cancer and Environmental Research Act that was passed in the fall of 2008. The goal was of course to improve the links between breast cancer and environmental, you know, factors. But could you go into a bit more detail about the status of that and where it stands right now and the provisions of the bill?

Ms. {Birnbaum.} Yes. Thank you for your help in establishing that bill. NIEHS and NCI both, already before the bill was passed, had three Breast Cancer in the Environment Research Centers. We have just in fact requested renewal of those and gotten in the proposals, and we have been getting a lot of information. And those are prospective

studies where we are actually recruiting young girls before puberty to look for environmental impacts on changes in their mammary gland development to see what might predispose to breast cancer later on.

As far as the Breast Cancer Environment Act, we have now formed the FACA panel that was part of the requirements of the Act. It took quite a while actually for the authority to come down to us to form that panel, and we are looking to have the first meeting of this advisory panel that will involve six federal scientists, six non-federal scientists and six community groups or representatives of advocacy groups. And that committee is anticipating having its first meeting hopefully in July.

Now, in addition, as I said, we fund about $30 million right now at the NIEHS in word-related to breast cancer and the environment. The centers again are co-funded with NCI, and we are very excited in part because some very interesting work has come out showing at least that in animal models, that early life exposure can actually predispose to breast cancer later on. We have also, for example, by measuring chemicals that are present in these young girls that we have recruited in three very different communities, we have found in fact in one of them, near Cincinnati, we found presence of a chemical of great concern at very elevate levels in these

young girls, but it is allowing us to identify the source of that chemical exposure and clean it up so that we prevent further exposure from going on.

Mrs. {Myrick.} Good. Well, I will be interested when you get the panel together if it is not too much trouble and you can let our office know. And I would be very interested in how the first meeting goes.

Ms. {Birnbaum.} We will be happy to, and we will also be happy to send you the list of the members of the committee.

Mrs. {Myrick.} That would be good, too. Thank you. I appreciate that. And for both of you, Dr. Falk as well, can you speak to your ability as leaders of both of your major organizations to share findings and data with other HHS entities like FDA and then the EPA for instance? And do the conclusive findings at ATSDR or NIEHS regarding specific chemicals end up affecting pending product approvals or regulatory reviews at EPA and FDA?

Ms. {Birnbaum.} Well, for example, FDA in January announced that the chemical BPA was of some concern, and that was really in large part based upon the findings of our Center for the Evaluation of Risk to Human Reproduction which had convened an expert panel and involved a lot of outside witnesses as well and developed a report which concluded that

there was some concern about BPA, and FDA now shares that concern. We work very closely with the FDA for example. They are a full partner in the National Toxicology Program and are very involved not only in the nomination of substances and evaluating the studies but actually we work with them in the conduct of a number of the studies that are carried on at the National Center for Toxicological research in Jefferson, Arkansas. In addition, we work very closely and provide information to EPA. So for example one of the things that NIEHS is mandated to do is issue a report on carcinogens which lists chemicals as known or anticipated to be likely human carcinogens. And the EPA has just decided that they will use that report as definitive information and will not need to do their own hazard assessments on those chemicals.

Mrs. {Myrick.} Dr. Falk?

Mr. {Falk.} Yes, Dr. Frieden, the new director of CDC, has made it I think a very high priority to work closely with the FDA, and that covers a broad range of issues from toxic chemicals to nutrition to smoking. You know, for example, FDA has a new Office of Smoking and Health, and we have at our toxicology laboratory a significant ability to look at toxic chemicals in cigarettes and smoke and people. And so we are able to provide them information on what we know about

work like that. So that is a very high priority. And historically we have always had a very close relationship with EPA. That is a very important one to us.

Mrs. {Myrick.} Well, it is important because of what EPA does and how they do things and the science or whatever you would call the different reasons behind the statements they make and the regulatory effects that they have on different chemicals et cetera or products.

Ms. {Birnbaum.} I would like to just add that EPA also serves on our executive board of the NTP, so in fact we have a meeting this afternoon, and Dr. Falk is on our executive board. And for example, Steve Owens, who is the Assistant Administrator for Toxins and Pesticides is on our board as is Paul Anastas who is the Assistant Administrator for the Office of Research and Development at EPA.

Mrs. {Myrick.} Very good. Thank you both, and thank you, Mr. Chairman.

Mr. {Pallone.} Thank you. I think we are concluded, but I did want to say first of all, I should mention that members may submit written questions to you usually within 10 days, and obviously we would like you to get back to us with responses as soon as possible. I know that some members have already asked and are going to follow up with some written questions, and we appreciate the response.

Mr. {Shimkus.} Mr. Chairman? I don't know if we asked for unanimous consent that all written statements could be submitted.

Mr. {Pallone.} Without objection, so ordered. I just want to say that I guess it is maybe obvious from what I have said that what you do is very important, and you know, this was an oversight hearing. It wasn't a legislative hearing. But as I have said, if there are things that you think we need to do to improve some of the things I mentioned before, the way you link environmental hazards and health concerns or do things better in the way you operate, we would certainly like to you know, get some input in that regard. And so I would appreciate your getting back to us. And thank you again for all you do. And without objection, the Subcommittee hearing is adjourned.

[Whereupon, at 11:26 a.m., the Subcommittee was adjourned.]