



Testimony

Before the Committee on Health,
Education, Labor and Pensions
Subcommittee on Children and Families
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Hearing:

The Climbing Cost of Heating Homes: Why LIHEAP is Essential
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Chairman Dodd and distinguished members of the Committee, my name is Deborah A. Frank. I am honored to be given the opportunity to share with you the experience of pediatric clinicians and the evidence of pediatric researchers on the importance of the Low Income Home Energy Assistance Program (LIHEAP). I am a Professor of Pediatrics at Boston University School of Medicine and a founder and principal investigator of the Children's Sentinel Nutrition Assessment Program (C-SNAP), a multi-site pediatric research group which focuses on the impact of public policies on babies and toddlers under the age of 3 years, the most vulnerable and the least visible of your constituents. I would like to stress that all the research I am presenting was completed by 2006 before the exponential increase in energy and food costs in 2007 and 2008, so it probably underestimates the current level of risk to our children.

I would be back at Boston Medical Center doctoring these "invisible" malnourished children, as I do most Wednesdays, if I did not know on the basis of research and clinical experience that LIHEAP is a child survival program, LIHEAP is a child health program, LIHEAP is a child nutrition program, and LIHEAP is a child development program.

LIHEAP, as you know, is instructed by statute to target benefits to "vulnerable households with the highest home energy needs," defined as those including either an

individual with disabilities, a frail elder, or at least one member who is a young child. This is a medically sound choice. (www.acf.hhs.gov/programs/liheap/perform/index/html accessed 3/06/06). From the first days of a pediatric internship it is drummed into our heads that the quickest way to make a baby stop breathing is to let the environment become too cold or too hot. Families, as well as doctors, know children will freeze to death before they starve to death, so confronted with the dire risks of dark and cold, parents turn to the only flexible part of a poor family's budget, the food budget. But this trade-off is not only often not adequate to avoid chronic problems keeping the house warm and lights on, but also has been shown by decades of research to jeopardize children's current and future health and development by increasing the family's food insecurity – what front line workers call hunger. A new report, Fuel for Our Future, from the Children's Sentinel Nutrition Assessment Program (C-SNAP) demonstrates that even before the recent record surge in energy costs, this “heat or eat dilemma” was depressingly familiar to America's poor and near-poor families and their doctors. These untenable choices wreak havoc on all our citizens, but particularly on the health of our youngest and most vulnerable children. Babies and toddlers ages zero to three, who developmentally are in the most rapid period of brain and body development, are also among the most physiologically vulnerable to cold stress. They lose body heat more rapidly than older children and adults because of their higher surface area-to-mass ratio. When babies' bodies have to divert already-scarce calories to maintain body heat, cold and hunger intertwine to jeopardize their current health and growth, as well as their future ability to learn and relate to others. The 14% of America's children of all ages who have special health care needs, although not targeted in our C-SNAP sample, are also actively

endangered by cold and dark. Cold temperatures trigger painful crises among children with sickle cell disease and severe attacks among children with asthma. And the health of children in general is threatened. How are parents to feed their children safely if they have no gas or electricity for refrigeration or cooking? How are they to administer nebulizer treatments without electricity? How are they to keep babies clean without warm water?

Low-income families pay a much higher percentage of their income for energy costs than families with higher incomes – 6% is considered affordable, but many poor families pay 15, 20 or even 40%. This squeeze causes terrible choices. Federal research shows that while both rich and poor families increase their expenditures on home fuel in unusually cold months, poor families offset this cost through decreasing food purchases with an average 10% decrease in caloric intake. Many inevitably sacrifice on both fronts, living with food scarcity while heating their homes with cooking stoves and space heaters, using candles and kerosene lamps for lighting, practices which increase the risk of fires, burns, and carbon monoxide poisoning. I want particularly to call to remembrance in this context Rebecca Zizi, age 9, and her brother, Rouben Zizi, age 11, who died in the emergency room of Boston Medical Center (the hospital where I work) on December 29, 2007 because of a fire started by the space heater their family had placed in their bedroom - a common practice when parents are worried they will not be able to afford enough heating oil to keep warm throughout our long New England winters. Such fires account for only 10% of all heating fires, but 40% of all deaths.

Indeed, it is not just lack of heat but lack of light that can kill children – 25% of all fatal candle fires occur in homes where the electricity has been cut off.

While not as soul-searing as the unnecessary deaths of children, there are many other serious and widely prevalent effects of families' inability to afford adequate energy which have long term ominous implications for the present and future well being of young Americans. The health effects of energy insecurity surface on the bodies of babies in emergency rooms at hospitals like Boston Medical Center during the cold of winter. Long before the current energy crisis, we found a 30% increase in the number of underweight infants and toddlers in the Boston Medical Center Emergency Room in the three months following the coldest months, compared to the rest of the year.

More recently, my colleague Dr. John Cook, who is here today, and the rest of the C-SNAP team have evolved and tested a measure of household energy security, which is under review in a medical journal as we speak.

We define energy security as follows:

Household Energy Security (HES) is consistent access to enough of the kinds of energy needed for a healthy and safe life in the geographic area where a household is located. An energy-secure household's members are able to obtain the energy needed to heat/cool their home and operate lighting, refrigeration and appliances while maintaining

expenditures for other necessities (e.g., rent, food, clothing, transportation, child care, medical care, etc.). A household experiences energy insecurity (HEI) when it lacks consistent access to the amount or the kind of energy needed for a healthy and safe life for its members.

This construct was put into practice as follows for families with children under 3 years:

- if in the past year the family had received a letter threatening a utility turn-off but had not yet experienced it, they were classified as *moderately energy insecure*;
- if they had tried to heat the house with a cooking stove or had suffered a utility turn-off or unheated or uncooled day because of inability to pay the bills, they were classified as *severely energy insecure*.

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We were appalled to find in a sample of almost 10,000 babies and toddlers seen in the C-SNAP sites of Baltimore, Philadelphia, Little Rock, Minneapolis, and Boston, more than a third lived in energy insecure households. This is really troubling since, in the subgroups of impoverished babies and toddlers of color we already have looked at, summarized in the C-SNAP report ‘Fuel for our Future’ which is available here today, energy insecure children were not only more likely to be food insecure, but they were sick, sick enough to be hospitalized.. (And I would point out that the cost of a single 3-4 day pediatric hospitalization currently costs six thousand dollars, enough to fund LIHEAP allotments for 20 families.) What also really startled us was that severely energy insecure infants and toddlers were 80-90% more likely than their energy secure

peers to be developmentally at risk. I know as a developmental behavioral pediatrician that children have great difficulty catching up from development delay during the critical period of brain growth in the first three years of life. Energy insecurity is associated not just with little children being sick and hungry, but with them being less ready for school long before they are out of diapers. These disturbing results hold true for children of all ethnicities – because our paper is under consideration I cannot yet share the details with you.

We do know there is a medicine that is partially effective in protecting children from the current epidemic of energy insecurity and its costly consequences, not just in human suffering, but in medical and educational costs now and in the future. That medicine is public energy assistance, which at the federal level is called LIHEAP (Low Income Home Energy Assistance Program). Research my colleagues and I recently published in the medical journal *Pediatrics* shows that, after considering background differences, children in LIHEAP-eligible families who rent and pay for their own heat, but do not get LIHEAP, were 23% more likely to be growing poorly and 32% more likely to have to be admitted to the hospital on the day we saw them in an emergency room than similar children in LIHEAP-eligible families that do receive it. LIHEAP's child health track record, although clearly not perfect, is better than many treatments doctors use every day. But there are two problems with this medicine: 1) it doesn't reach most in need and 2) for those who receive it the dose is too low.

LIHEAP is currently funded to reach only about 16% of those who should get it.

I was shocked to learn from Dr. Cook and his economist colleagues that the average yearly LIHEAP grant has declined to \$314.00 per family per year, only about 1/3 of the cost of one tank of oil, which represents only enough oil to keep a family warm for about two weeks. This is down from an already inadequate \$427.00 in FY2005 when our study was in progress and the cost of home energy was high but not as high as it is today. Thus the LIHEAP “medicine” doesn’t reach most of the families who need it and, for those who do get it, the dose is what doctors call “subtherapeutic” – below the level needed for adequate treatment.

With food costs the highest in 10 years and energy costs the highest on record, my pediatric colleagues and I are deeply concerned that this already grim epidemic of cold, hunger, illness, and developmental delay is going to effect ever increasing numbers of America’s children. We can see the problem evolving just as clearly as we see a new and dangerous strain of influenza. We pediatricians can diagnose the problem, but only you, our leaders, can make the treatment available in adequate doses to more of those who need it by increasing and stabilizing LIHEAP funding. I am here to remind you again what pediatric clinicians and researchers know but has not been addressed in most policy debates – LIHEAP is a child survival program, LIHEAP is a child health program, LIHEAP is a child nutrition program, and LIHEAP is a child development program. I am so thankful you care enough to be here today to show that you are willing to consider evidence-based policies to fuel the future of our children. It is my hope that you will guide your legislative colleagues to make decisions so fewer of America’s children will die or be chronically impaired by hunger, ill health, and slow learning for want of safe and adequate energy.

