



## **Environmental Health Legislative Proposals**

This document has been prepared by the Reproductive Health Technologies Project in consultation with outside experts to outline key environmental health proposals suitable for action. Support for these legislative proposals is provided below.

### **KEY LEGISLATIVE PROPOSALS**

#### **Reform the Toxic Substances Control Act (TSCA) and Enforce the Consumers' Right to Know About Dangerous Chemicals.**

With its passage in 1976, TSCA declared "safe" some 62,000 chemicals already in use, with little or no data to support such a declaration. Since enactment, another 20,000 chemicals have entered the stream of commerce with little or no data to support their safety. In the 30 years since TSCA was enacted, EPA has banned only five chemicals. In June of 2008, the American Medical Association's House of Delegates passed a resolution calling upon the US government to reform its chemicals policy and restructure TSCA. The pre-market testing regimens that the Food and Drug Administration currently uses for pharmaceuticals and the data requirements for chemicals that are part of the European Union's REACH (Registration, Evaluation, Authorization and Restriction of Chemical substances) provide models for what new comprehensive chemical policy can be. A vehicle for reform was recently introduced in Congress: The Kid Safe Chemical Act, introduced in the Senate by Senator Lautenberg and in the House by Representatives Solis and Waxman.

#### **Authorize the National Academy of Sciences (NAS) "Study of Studies."**

Increasing evidence links environmental toxins and human infertility and birth defects, but the federal government is not collecting data on this subject in a systematic and authoritative manner. The president's budget for fiscal year 2010 should authorize the National Institute of Environmental and Health Sciences to engage NAS to conduct a review of existing and forthcoming research and issue a report on the links between chemical contaminants and reproductive health.

#### **Expand and Modernize Our Disease Surveillance Infrastructure.**

The disease surveillance system, specifically the National Center for Health Statistics, the National Environmental Public Health Tracking Program, and the biomonitoring efforts of the Centers for Disease Control and Prevention must be expanded and modernized. The Bush Administration has designated the CDC's biomonitoring program and the National Health Interview Survey for crippling cuts that will need to be restored expeditiously. Without a strong health-monitoring infrastructure, we cannot monitor reproductive health outcomes such as disparities in low-birth weight births among racial groups, and trends in female health developments.

#### **Support Environmental Research and Clinician Training.**

Renew and expand support for National Toxicology Program, National Institute of Environmental Health Studies, National Institute of Occupational Safety and Health to study biology of pregnancy, fetal development and reproductive health, the complexities of racial and social disparities and the impact of the environment on human health. Community-based research is essential for an improved understanding of disproportionate impacts. Clinician training should be funded to add environmental health issues to the provision of health care.

### **Fund the National Children's Health Study.**

The Children's Health Act of 2000 authorized the National Institute of Child Health and Human Development (NICHD) and other agencies to follow 100,000 children from birth to age 21 to measure environmental influences on their health and development. The study seeks to address 6 chronic illnesses which cost Americans \$642 billion each year (obesity, injury, asthma, diabetes, schizophrenia, and autism). If the study resulted in a 1% reduction in the cost of these diseases, it would save Americans \$6.4 billion a year, paying for itself twice over in only one year. However, despite all the work that has gone into the design of the study, President Bush recommended zero funding for fiscal year 2009. For the study to move forward, the new president will need to restore funding and continue to fund the program at a suitable level.

### **Acknowledge and Reduce Socioeconomic and Racial Disparities.**

Recent studies have shown that people of color, recent immigrants and the poor are far more likely to work with chemicals, show higher levels of certain chemicals in biomonitoring studies, have less access to institutions that protect them and suffer disproportionately from exposure to environmental contaminants where they live. Premature puberty, low birth weight and premature deliveries and breast cancer mortality are all reported to be higher in African-American women. Improved access to health care, job training, adequate housing, education, transportation, child care and other socioeconomic factors can individually and collectively reduce the environmental impacts on women's health.

## **BACKGROUND**

### **In the US today, there are disturbing trends in the health of women...**

- About 10% of women report difficulty conceiving and maintaining a wanted pregnancy. Women under the age of 25 report the largest increase in this problem.
- An expert panel recently commissioned by the government concluded that breast development and menarche in girls is beginning at an earlier age and that this is an adverse effect linked to breast cancer and behavioral disorders.
- Compared to 30 years ago, over 25% more women get breast cancer and three times as many women are being diagnosed with thyroid cancer.
- While there is no population-wide data, estimates suggest that uterine fibroids and endometriosis are harming the health and fertility of between 10 to 50 percent of American women. Uterine fibroids are the single largest reason for hysterectomy in women of childbearing age.

### **...and in their children.**

- Thirty percent more babies are born premature, and on average babies are born one week earlier now than they were 15 years ago. Prematurity puts a child at risk for a host of health problems, including neurodevelopmental and respiratory conditions and later in life diabetes and heart disease.
- Human studies show that endocrine disrupting chemicals are impacting the ratio of male to female births. The most recent example of this finding is a new study of women in the San Francisco Bay area who gave birth in the 1960s. If the mother's PCB levels were relatively high, they were 1/3 less likely to give birth to baby boys.
- Some of the most common birth defects today are malformations of the male reproductive system. Hypospadias (deformities of the penis in infants), cryptorchidism (undescended testicles) and testicular cancer appear to be increasing while sperm count and testosterone levels are declining in certain populations.

- While cancer mortality is declining, the incidence of most childhood cancers continues to rise. These cancers are suspected to occur from alterations while in the womb.

**New research links these human health problems to chemicals and other problems in the environment.**

- In biomonitoring studies of over 150 contaminants in the American people, the U.S. Centers for Disease Control and Prevention (CDC) reported that all 150 chemicals were detected in some portion of the U.S. population and that several of the chemicals, such as environmental tobacco smoke, lead, mercury, phthalates and bisphenol A are detected in nearly all or all of the population. Some of the contaminants were measured at levels that cause adverse effects on reproductive health in animal studies.
- Epidemiologic studies in several countries have linked maternal exposure to air pollution and low birth weight and preterm delivery.
- Animal studies show that exposures to chemical contaminants around the time of conception, during pregnancy or during infancy can be particularly powerful because of these are times of exquisite vulnerability.
  - During this time, exposures to bisphenol A found in polycarbonate plastic and can linings can cause permanent changes and increased risks of later reproductive health problems (infertility, miscarriage, breast cancer, prostate cancer).
  - Prenatal exposure to phthalates found in personal care and vinyl products has been linked to reproductive effects in male babies, like undescended testicles and deformities of the penis.
  - Cadmium, a metal found in cigarette smoke and in other types of air pollution, has been linked to gynecological disorders in women, such as endometriosis, and reduced sperm motility.
  - Animals exposed prenatally to perfluorinated chemicals, common in stain proof and stick-free products, show increased allergic response, elevated cholesterol, abnormal thyroid hormone levels, liver inflammation, and weaker immune systems. Human babies born with higher levels of these chemicals in their umbilical cord blood have lower birth weight and smaller body mass.
- Health effects can be passed from one generation to the next, effecting the children and grand children of exposed mothers and fathers.
- A wide range of wildlife populations has been adversely affected by exposure to endocrine-disrupting contaminants. Impacts among birds, fish, shellfish, mammals and reptiles include decreased fertility and increased reproductive tract abnormalities; feminization and demasculinization in the males; and masculinization and defeminization in the females.