



Open Letter to President Bush on Protecting the Most Vulnerable

Dear President Bush:

We are writing to call your attention to a serious problem in public health protection and ask that you take action to fix it.

Presently, many federal radiation protection standards are based on average lifetime exposure or on "Reference Man," a hypothetical adult "Caucasian" male who is 20 to 30 years old, weighs 154 pounds, is five feet seven inches tall, and is "Western European or North American in habitat and custom." Reference Man is widely used to set federal rules and regulations, for instance, limits on how much residual radiation will be allowed in radioactively contaminated soil.

The problem is that different groups are affected differently than adult men when exposed to radiation or toxic materials. According to the National Research Council of the National Academies, cancer mortality risks for women are 37.5 percent higher than for men for the same radiation exposure. Sometimes the most vulnerable period is not in adulthood but rather in infancy, childhood, puberty, or when the ova are developing in a female fetus. Prenatal exposures to certain toxic chemicals or radiation can increase the risk of certain disorders, like breast cancer, later in life. The combined effects of chemicals and radiation are little understood.

Further, the use of Reference Man is not in accord with Presidential Executive Order 13045 on the Protection of Children From Environmental Health Risks and Safety Risks, which you endorsed with amendments in 2003. The Order acknowledges that children are disproportionately vulnerable to environmental hazards and directs federal agencies to ensure their policies address the disproportionate risks.

It is urgent that these problems be addressed systematically and broadly. Today, public water bodies used for drinking, irrigation, and recreation are polluted with radionuclides, such as tritium, that can cross the placenta and toxic materials, such as mercury, which affect developing fetuses and children.

We are counting on your leadership to make it a central principle of federal rules and regulations to protect those who are most susceptible to radiation and toxic chemicals, whether they be women, pregnant women, children, the embryo/fetus at various stages of development, or, indeed, in some cases, men. To accomplish that goal we urge you to take the following measures:

1. Issue a Presidential Executive Order to all federal agencies and departments to:
 1. Review their definitions of "Reference" persons and modify them as necessary so that all rules protect those *most at risk* from exposure to radiation and/or toxic chemicals, be they pregnant women, the embryo/fetus, infants, children, and/or some other group;
 2. Review their rules regarding protection of prospective parents and pregnant women to ensure that future generations are not endangered or being harmed due to workplace exposures and to ensure that no discrimination or loss of seniority results from necessary health protections;
 3. Update computer models and other models used to estimate dose and risk for regulatory



- purposes so they take into account the embryo/fetus and children, and keep the models updated as new scientific evidence becomes available; and,
4. Prohibit discrimination based on genetic information when creating or enforcing workplace health protections, including protections for pregnant women, and ensure strict privacy in genetic matters.
 2. Support legislation or propose new legislation in Congress requiring all federal regulations that affect public health and the environment to be regularly reviewed and revised so as to protect those most at risk; and,
 3. Initiate or intensify research to better understand and estimate the human health effects of combined exposure to radiation and toxic chemicals.

Thank you very much for considering our request on this crucial matter related to public and environmental health. For more information, please contact Dr. Arjun Makhijani (arjun@ieer.org) or Lisa Ledwidge (ieer@ieer.org), President and Outreach Director of the Institute for Energy and Environmental Research, respectively, or visit www.ieer.org.

Sincerely,

Initial signatories as of October 18, 2006 (who signed on by invitation, prior to opening it up to the public)

1. Arjun Makhijani, PhD, President, Institute for Energy and Environmental Research, Takoma Park, Maryland
2. Brent Blackwelder, PhD, President, Friends of the Earth, Washington, DC
3. Mary Brune, Co-Founder, Making Our Milk Safe, Alameda, California
4. Theo Colborn, PhD, President, The Endocrine Disruption Exchange (TEDX), Paonia, Colorado
5. Marie Dennis, Director, Maryknoll Office of Global Concerns
6. Michael Flynn, Associate Director, Center on Terrorism, John Jay College of Criminal Justice, New York, New York
7. Erica Frank, MD, MPH, Professor and Senior Advisor, Preventive Medicine Residency Program, Department of Family and Preventive Medicine, Emory University School of Medicine, Atlanta, Georgia
8. Susan Gordon, Director, Alliance for Nuclear Accountability, Seattle, Washington, and Washington, DC
9. Alexandra Gorman, Director of Science and Research, Women's Voices for the Earth, Missoula, Montana
10. Tony Guzman, Outreach Director, Nevada Conservation League, Las Vegas, Nevada
11. Nell Hidalgo, Forensic Science graduate student, John Jay College of Criminal Justice, New York, New York
12. Donald Hoppert, Director of Government Relations, American Public Health Association, Washington, DC
13. Howard Hu, MD, MPH, ScD, Chair and Professor, Dept Environmental Health Sciences, University of Michigan School of Public Health, Ann Arbor, Michigan
14. Maureen McCue MD, PhD, Coordinator, Iowa Chapter of Physicians for Social Responsibility, Iowa City, Iowa
15. Marian Naranjo, Citizens Living Around Nuclear Sites, Santa Clara Pueblo, New Mexico
16. State Senator-elect Nan Grogan Orrock, D-Atlanta, Georgia



17. John Rachow, PhD, MD, Geriatrician, University of Iowa, Iowa City, Iowa
 18. Jeanne Rizzo, RN, Executive Director, Breast Cancer Fund, San Francisco, California
 19. Kimberly Roberts, Director, Security Program, Physicians for Social Responsibility, Washington, DC
 20. Ted Schettler, MD, MPH, Science and Environmental Health Network, Ames, Iowa
 21. Susan Shaer, Executive Director, Women's Action for New Directions, Arlington, Massachusetts
 22. Sierra Club Radiation Committee, San Francisco, California
 23. Kathleen Sullivan, PhD, Co-ordinator, Nuclear Weapons Education and Action Project, Educators for Social Responsibility-Metro, New York, New York
 24. Makani Themba-Nixon, Executive Director, The Praxis Project/PATH, Washington, DC
 25. State Senator Regina Thomas, D-Savannah, Georgia
 26. David Wallinga, MD, Director, Food and Health, Institute for Agriculture and Trade Policy, Minneapolis, Minnesota
 27. LaDonna Williams, People For Children's Health & Environmental Justice, Vallejo, California
 28. Nsedu Obot Witherspoon, MPH, Executive Director, Children's Environmental Health Network
 29. State Representative Diane Winston, R-Covington, Louisiana
-

[Additional signatories \[PDF\]](#) (in alphabetical order by organization)

3508 signatures as of 11:04 am EST, Friday, January 16, 2009

Letter delivered to the White House with initial signatories on October 19, 2006

Letter remained open for signatures until January 16, 2009