

HELP STRENGTHEN RADIATION PROTECTION STANDARDS



PHOTO CREDIT: MARTIN PODOR

WE INVITE YOU TO SIGN ON TO THIS OPEN LETTER to fix an important problem in public health protection: the widespread use of "Reference Man" in setting radiation protection standards.

Instead, federal agencies need to 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.

We are under no illusions that the White House will act with haste on this important issue. However, if we get thousands of signatures, especially from groups representing a broad spectrum of society, we are likely to get the attention of the media and Congress and educate large numbers of people about this important environmental health matter:

We invite you, our readers, to sign the letter. If you are affiliated with one or more organizations — whether professional, faith-based, PTA, neighborhood, health-related, etc. — please ask them to sign on, too. Please spread the word about this important issue.

Sign on at www.ieer.org/campaign/ or call IEER at 301-270-5500. IEER will forward additional signatories to the White House until positive action is taken.

If you have questions or would like more information, please contact Lisa Ledwidge of IEER at ieer@ieer.org or 612-722-9700.

Dear President Bush:

**OPEN LETTER TO
PRESIDENT BUSH
ON PROTECTING THE
MOST VULNERABLE**

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:
 - a. 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;
 - b. 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;
 - c. 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,
 - d. 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,

(See www.ieer.org/campaign/ for list of current signatories.)