

Researchers find that an infant's rapidly developing brain and central nervous system are extremely susceptible to damage because the placenta allows the passage of methylmercury, the most toxic form of mercury. Prenatal mercury exposure has been associated with toxic effects on the developing brain, including adverse effects on fine motor skills, memory, and learning ability.

Addressing Mercury Pollution

Power plants are the primary man-made source of mercury. Over 1,100 coal-fired power plants, the nation's largest source of airborne mercury pollution, send an estimated 48 tons of mercury into the atmosphere annually.

Regulatory decisions concerning allowable levels of emissions are made using a cost-benefit analysis. Public health experts assert that the neurological damage caused by mercury exposure *in utero* is irreversible. Should we not protect children from mercury toxicity, and spread the cost of emissions reduction throughout the public?

A Growing Challenge

While chemicals play a major role in improving the quality of life for all Americans, many peer-reviewed studies suggest that some may pose serious long-term health risks, including cancer and childhood developmental disabilities. The National Academy of Sciences (NAS) estimates that 25 percent of the developmental and neurological deficits in children are due to the interplay between chemicals and genetic

factors, while 3 percent are caused by exposure to chemicals alone.

The Precautionary Principle

We must protect God's gift of creation to ensure our children's "right to a healthy environment." It is not enough to demand policies and regulations that address the unintended consequences of technological development.

The United States Conference of Catholic Bishops (USCCB) tracks mercury-related legislation as part of the Catholic Coalition for Children and a Safe Environment (CASE), working to reduce emissions in order to protect the environment and human health, particularly in vulnerable populations.

Conclusion

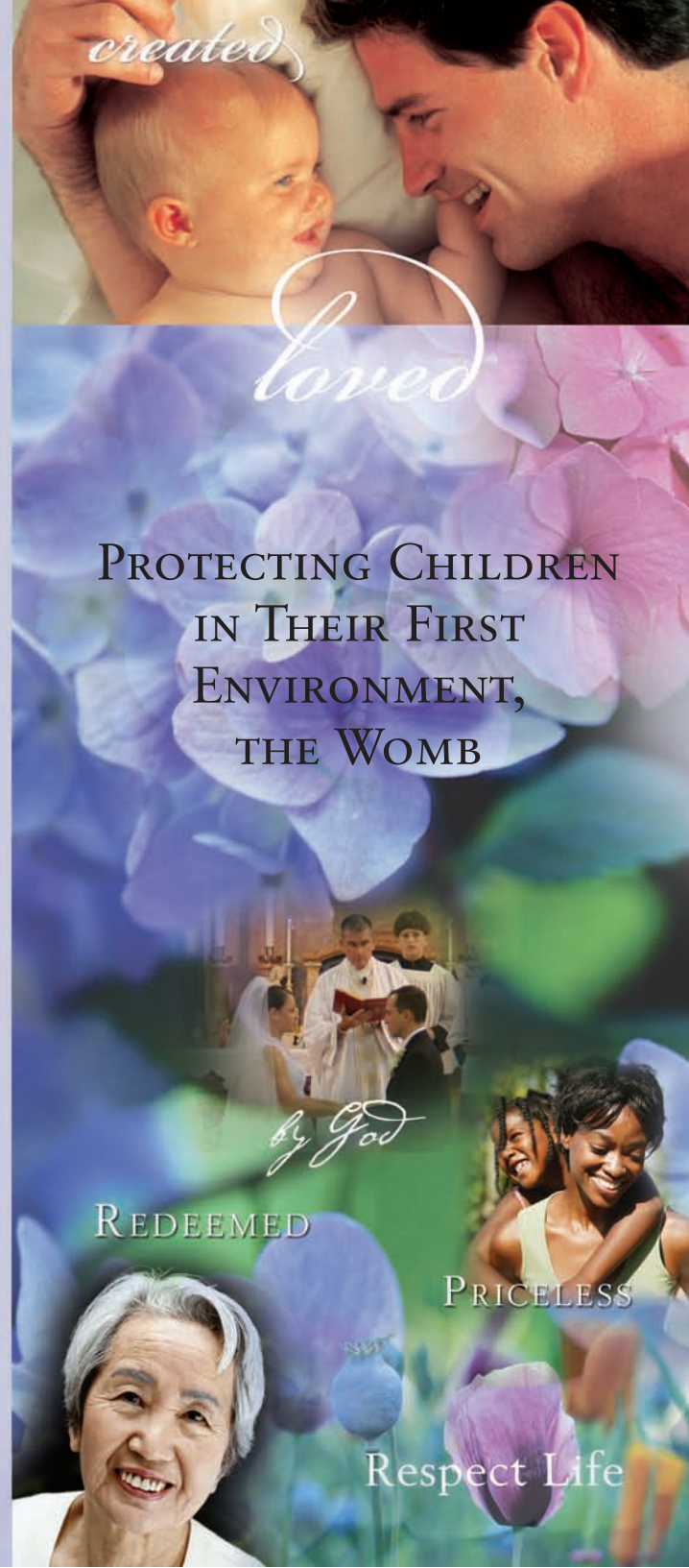
As we highlight the Respect Life program and celebrate the feast day of St. Francis, we should reflect on our personal lifestyle, and also consider how abuse of our environment threatens children's health and their ability to realize their full potential, before as well as after birth.

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Respect Life Sunday, on the first weekend of October, falls near the October 4 feast of St. Francis of Assisi, named the patron saint of the environment by Pope John Paul II in 1979. St. Francis can inspire us to reflect anew on the ways our attitudes, uses, and abuses of creation affect the poor and vulnerable, especially our children both before and after birth.

Protecting Human Life and Caring for Creation

As Catholics we are called to protect human life, to care for others, and to respect God's gift of creation. The Church's call to respect human dignity and promote the common good of the entire human family, beginning with the most vulnerable, leads it to champion unborn children's right to live.

In their 1991 statement *Renewing the Earth*, the U.S. Catholic bishops remind us that

[W]e are charged with restoring the integrity of all creation. We must care for all God's creatures, especially the most vulnerable. How, then, can we protect endangered species and at the same time be callous to the unborn, the elderly, or disabled persons? Is not abortion also a sin against creation? If we turn our backs to our own unborn children, can we truly expect that nature will receive respectful treatment at our hands? The care of the earth will not be advanced by the destruction of human life at any stage of development. As Pope

John Paul II has said, "protecting the environment is first of all the right to live and the protection of life."

--(quoting October 16, 1991 homily of Pope John Paul II at Quiaba, Mato Grosso, Brazil)

Children deserve special protection for they are the most innocent and vulnerable among us. Yet while it is easier today than decades ago to protect children from environmental toxins, the risk of exposure to so many more untested synthetic chemicals is a challenge for scientists and for parents who are ultimately responsible for figuring out how best to protect their children from before birth into adulthood.

Among the most susceptible to environmental hazards are children, born and unborn. In the womb, especially, they face a disproportionate threat to their neurological development from environmental toxins like mercury and lead.

Exposure to air pollutants and toxins is also significantly more harmful to children than to adults. Their developing organs are not as efficient as those of adults in dealing with pollutants. Many children are exposed to environmental hazards at an early age, giving them more time to develop slowly-progressing, environmentally-triggered conditions such as asthma, learning disabilities and certain cancers.

It was once assumed that children in the womb were protected from the outside environment. We know now, for example,

that the placenta does not protect umbilical cord blood and the developing baby from most chemicals and pollutants the mother encounters in the environment. And, exposure to toxins *in utero* can harm the unborn child.

The Disproportionate Burdens of Pollution

Children living in poverty, disproportionately consisting of black and Hispanic children, face multiple obstacles to their development, including rates of lead poisoning and asthma-related hospitalizations and deaths higher than those of the general population. Outdoor air pollution, unsafe and crowded housing, contaminated water and soil, and industrial waste are just a few of the environmental hazards that are disproportionately concentrated in low-income, minority communities.

Some Findings on Mercury Pollution

Addressing environmental health issues is challenging. Often the science is not clear or conclusive. Such is the case with mercury, a known toxin that can interfere with the nervous system and the development of the human brain from early in pregnancy.

According to a consumer advisory jointly issued by the Food and Drug Administration (FDA) and the Environmental Protection Agency (EPA), women of childbearing age, pregnant women, nursing mothers and children under five are especially at risk from unsafe levels of mercury.