



MEMORANDUM

TO: Interested Parties
DATE: January 9, 2009
FROM: Reproductive Health Technologies Project
RE: Oral Contraceptives and the Environment

In early 2009, the [Vatican newspaper published](#) a report claiming that contraceptive pills negatively impact male fertility and the environment. Not surprisingly, the Vatican failed to look honestly at the scientific evidence or at the bigger picture. Over the past couple of years, [RHTP has been concerned](#) about the larger issue of pharmaceuticals in our water and, more specifically, the role oral contraceptives may play in this problem.

As part of that effort, we have developed this memo to interested parties to clarify the facts around a complex issue. We are committed to staying on top of the science and we plan on providing periodic updates to colleagues. If you're interested in receiving these updates, please email your contact information to RHTP's Programs and Policy Director, Jennifer Rogers, at jrogers@rhtp.org.

- **Human exposure to chemicals in our every day environment deserves more attention.** [A growing body of scientific evidence](#) indicates that certain chemicals in our environment are negatively affecting male and female fertility as well as the health of the developing fetus. More and more reproductive health, rights and justice organizations, advocates, and [health care providers](#) are calling for research that will enhance our knowledge of this issue and for reforms that will minimize our exposure to harmful chemicals.
- **The science on causes and consequences of exposures is complex.** One of the reasons for this complexity is the multitude of different chemicals that can have hormone-like effects, including synthetic chemicals, naturally occurring (plant and animal) estrogens, and pharmaceutical estrogens. To add to the complexity, each of these chemicals can have multiple and varying sources.

Chemicals that mimic hormones are referred to as endocrine disruptors and they are present throughout our environment and in products we use every day, such as plastics, computers, and household cleaners. Endocrine disruptors have been associated with a host of negative health outcomes including breast cancer, endometriosis, ovarian cysts, and infertility. Naturally occurring estrogens come from plants and animals while synthetic estrogens are found in a variety of pharmaceuticals including hormone replacement therapies, chemotherapy drugs and some contraceptives.

While there is evidence that estrogenic contaminants in the environment are causing the feminization of male fish, there is no evidence that oral contraceptives are the main culprit. At RHTP, we are aware of only a few preliminary studies that focus exclusively on the impact of the specific synthetic estrogen (17α -ethinylestradiol, commonly called EE2) contained in *some* oral contraceptives; many oral contraceptives do not contain EE2. In

most cases, EE2 is tested in its “pure” form, not as it is released in a woman’s urine which is the way most pharmaceuticals are released into the water supply. We need more research to determine the source of environmental contaminants and to determine the most effective way to limit their impact.

- **The Vatican’s effort to disparage contraceptives misses the larger picture and ignores the benefits of contraception to reproductive health and the environment.** Most mainstream scientists agree that the human impact on the environment is the most detrimental. Contraception has enabled women and families to decide when and how many children to have and this in turn has been shown to improve the health of children, women, communities and the planet. The Vatican’s overstatement of this science is just the most recent twist in their decades-long rejection of safe, effective modern methods of contraception.

- **There are better and more productive steps we can take to minimize exposures :**
 - Ensure that waste water treatment plants use the most effective methods to remove contaminants;
 - Support more research into the impact of all pharmaceuticals or other contaminants in the environment;
 - Fundamentally overhaul the Toxic Substances Control Act, our nation’s chemical regulatory law, which has not been amended since it was passed in 1976 through support of the [Kids Safe Chemical Act](#); and
 - Encourage “green chemistry” so that all pharmaceuticals including contraceptive pills are safe and effective while not harming the environment.