
AWRA 2007 SUMMER SPECIALTY CONFERENCE
Vail, Colorado

June 25-27, 2007

Copyright © 2007 AWRA

ENDOCRINE DISRUPTORS, THE FEMINIZATION OF AMERICA, AND FIVE-LEGGED FROGS

Steve McDonald*

ABSTRACT: The anecdotal evidence is everywhere. Sperm counts have dropped by over 40% in the last 50 years (Skakkebaek, N., et.al. 1992). Fecundity rates (the ability to get pregnant) in the United States have dropped in the last 15 years from 1 in 8 couples (defined as one year of trying to become pregnant), to 1 in 5 couples today (National Survey of Family Growth (NSFG), 1995). Testicular cancer has increased by over 60% the last 25 years (U.S. National Cancer Institute, 2005), while breast cancer has increased by over 30% (Ries, et al,1994). White women in the San Francisco Bay area experienced the highest rate among 162 areas reporting incidence data to the IARC, with an annual rate of 104.2 per 100,000, adjusted to the world standard population (Parkin et al., 1992). What is happening to our sexuality? What are the sources of these unexplained trends? Are we safe? More importantly, what will the future look like? What can be done right now to protect us? Studies from around the world have confirmed that water supplies and treated wastewater contain pharmaceutically active levels of newly discovered chemicals that are causing hormonal changes (endocrine disruptors) in fish, frogs, and aquatic life. Public concern over our health and sexuality has been increasingly reported in radio news reports, trade journals, television, and the popular press. What is happening in our environment, and how is it affecting our health? In summary, this paper will present the public perception of the story that is rapidly developing in the popular press. The story of endocrine disruptors, pharmaceuticals, and personal care products from the public's perspective. This includes linking the many anecdotal connections to a common framework of understanding, and summarizing how the public sees the problem, and potential solutions. Understanding of the public's real "outrage", provides perspective and insight into concerns which are likely to be manifest through increased regulatory requirements, and which will impact the water and wastewater industry today, and in the future.

* Partner, Carollo Engineers, 2700 Ygnacio Valley Rd., Walnut Creek, CA 94598, USA, Phone: 925-788-7001, Fax: 925-932-0208, Email: smcdonald@carollo.com