

Reproductive health and birth outcomes (RHBO) have to do with the well-being of mothers, fathers, and infants. However, women's health is a priority. Furthermore, the exact cause of poor outcomes related to having a child often cannot be pinpointed, and more research is necessary to determine exactly how some environmental factors influence RHBO.

HOW CAN OUR ENVIRONMENT AFFECT RHBO?

While more research is necessary to determine exactly how some environmental factors influence RHBO, there is a strong relationship between the environment and RHBO. The Centers for Disease Control and Prevention reported that Pennsylvania's infant mortality rate in 2017 was 6.1 deaths per 1,000 live births compared to 5.8 deaths per 1,000 live births for the U.S.

Air, water, and soil pollution can make it difficult to get pregnant or to have a healthy infant. Low-level exposures to environmental toxins may reduce fertility. Thousands of toxins, such as alcohol, nicotine, mercury, and lead, can pass from the mother to the fetus. This puts the fetus at risk for low birthweight, premature birth, fetal/infant death, and chronic health problems.



HOW CAN ONE LIMIT EXPOSURE AND IMPROVE RHBO?

- Do not smoke and avoid alcohol.
- Use proper safety equipment if working with noxious chemicals.
- Stay indoors when outdoor air quality is poor.
- Consult a health care provider to learn which medications and food are safe for pregnancy.
- Visit a doctor for prenatal care, attend infant safety classes, and take a prenatal vitamin with folic acid.
- Place sleeping infants on their backs to help prevent Sudden Infant Death Syndrome.

HOW IS RHBO MONITORED IN PENNSYLVANIA?

Pennsylvania tracks the outcomes below. Data are on the Enterprise Data Dissemination Informatics Exchange¹ (EDDIE) by county. Furthermore, the Pennsylvania Maternal Mortality Review Committee will study pregnancy related deaths in the state to develop prevention strategies. The rate of pregnancy related deaths has gone up over the last three decades. Additionally, the state runs family support programs² that work with pregnant women and families. Data made available by Pennsylvania Vital Statistics include:

- Total Fertility Rate (TFR) is the total number of children a woman would have if she lived through her childbearing years having children based on the current age-specific birth rates.
- Infant Mortality is the death of an infant within the first year of life. There are separate mortality rates for the entire first year of life, less than 28 days (neonatal), between 28 days and one year (post neonatal), and fetal deaths greater than 28 weeks' gestation together with deaths of infants less than 7 days old (perinatal).
- Premature birth or preterm birth is when a baby is born before 37 weeks' gestation, i.e., more than three weeks before the due date. A baby is very preterm if they are born before 32 weeks' gestation.
- Low Birthweight is when a baby is born weighing less than 2500 grams (5 lbs. 8 oz.). Very low birthweight is less than 1500 grams (3 lbs. 4 oz.).
- Sex Ratio at Birth is the number of male babies born in a group divided by the number of female babies born in the group. For humans, the sex ratio at birth is about 1.05 males to every 1 female.

If you have questions or concerns about RHBO, please contact the
Division of Environmental Health Epidemiology at dehe@pa.gov or 717-787-3350.

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1. <https://www.health.pa.gov/topics/HealthStatistics/EDDIE/Pages/EDDIE.aspx>
2. <https://www.education.pa.gov/Early%20Learning/Family%20Support%20Programs/Pages/default.aspx>