

PREGNANCY-RELATED MORTALITY RATE

1. Definition:

PREGNANCY-RELATED MORTALITY RATE is the number of resident deaths of individuals within 42 days of pregnancy termination **due to any cause** in a specified geographic area (country, state, county, etc.) divided by total resident live births for the same geographic area for a specified time period, usually a calendar year, and multiplied by 100,000.

2. Calculation:

(Number of resident pregnancy-related deaths/Number of resident live births) x 100,000

$$\frac{\text{Number of Resident Pregnancy-Related Deaths}}{\text{Number of Resident Live Births}} \times 100,000$$

3. Examples:

91 pregnancy-related deaths in 2008 among state residents

130,000 live births in 2008 to state residents

$91/130,000 \times 100,000 = 70.0$ pregnancy-related deaths per 100,000 live births in 2008 among state residents

4. Technical Notes:

- Pregnancy-related deaths differ from maternal deaths, as defined by the World Health Organization (WHO), in that a pregnancy-related death is defined as “the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the cause of death”. In contrast, a maternal death is restricted to deaths “from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes.”
- Pregnancy-related deaths include not only deaths commonly associated with pregnancy such as hemorrhage, pregnancy-induced hypertension, and embolism (which are captured in the WHO definition of maternal mortality) but also deaths not traditionally considered to be related to pregnancy such as accidents, homicide, and suicide.
- Under the International Classification of Diseases Revision 10 (ICD-10), the cause of death codes that are associated with maternal deaths include A34, O00-O95 and O98-O99. Note that if the cause of death in a pregnant woman (or up to 42 days post-partum) could not be determined or if there was insufficient evidence to code a cause of death as an O-code, then it would still be classified as a pregnancy-related death but not as a maternal death.
- Aside from maternal-specific cause of death codes, pregnancy-related deaths can also be ascertained from the revised death certificate, issued as the model certificate in 2003, which includes a new item on pregnancy status for deceased females with the intent to improve the completeness and comparability of

maternal mortality data nationwide. This revision has led to increases in the numbers of maternal deaths

- Note that health jurisdictions or organizations may not necessarily follow the WHO definitions for maternal and/or pregnancy-related deaths. For example, the American College of Obstetrics and Gynecologists (ACOG) defines “pregnancy-related death” as a death up to one year after termination of pregnancy from a cause related to the pregnancy. The California Maternal Quality Care Collaborative has a [comparison of the WHO and ACOG definitions](#) on their website.
- This [NCHS article](#) discusses how the definition of maternal mortality and related concepts can affect measurements and trends.
- See also the NAPHSIS definition of [maternal mortality rate](#).
- The Division of Vital Statistics (DVS) at NCHS follows standards for use of the terms “death rate” and “mortality rate” in naming and reporting common vital statistics rates for deaths. The NAPHSIS standard measures shown here follow the DVS standards, primarily to maintain consistency with DVS for naming conventions. Please note that states/registration areas and other federal government organizations within and outside NCHS/CDC may not follow the DVS standards when naming and reporting death/mortality rates.