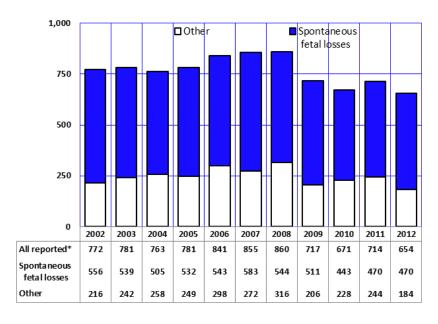


1C.

FETAL, PERINATAL, AND MATERNAL DEATHS

In Arizona, reportable fetal deaths are those after 20 completed weeks of gestation or, if the gestational period is unknown, the fetal death certificate should be filed if the fetus weighs more than 350 grams (*ARS 36-329*; *Arizona Administrative Code, R9-19-302*). In addition to spontaneous stillbirths, any induced termination of pregnancy at 20 or more weeks of gestation (or, if the gestation period is unknown, when the weight of the product of human conception is more than 350 grams) also requires the filing of a fetal death certificate.

Figure 1C-1 Trends in Fetal Deaths, Arizona, 2002-2012

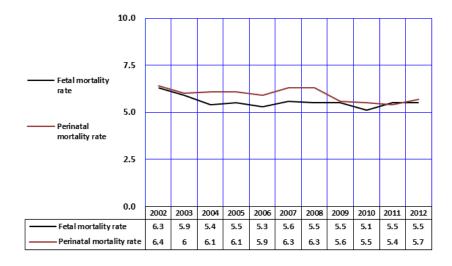


The practice of including spontaneous or induced terminations of pregnancy prior to 20 weeks of gestation and/or of any weight that began in 1997 brought a rather substantial increase in the number of annually reported fetal deaths in Arizona from 483 in 1996 to 637 in 1997.

The number of all reported fetal deaths in Arizona (including late term abortions) in 2012 was 654 compared to 860 in 2008 (**Figure 1C-1**, **Table 1C-3**). The annual number of reportable spontaneous fetal losses decreased by 19.4 percent from 583 in 2007 to 470 in 2012 (**Figure 1C-1**, **Table 1C-3**).

Note: All reported includes spontaneous and induced termination of pregnancy at 20 or more weeks of gestation (or if gestational age unknown, the deaths of fetuses of at least 350 grams or more) and some stillbirths prior to 20 weeks and of any weight.

Figure 1C-2
Fetal^a and Perinatal^b Mortality Rates, Arizona, 2002 – 2012



Perinatal mortality refers here to death of a fetus of at least 28 weeks gestational age or of an infant less than 7 days old. The perinatal death rate per 1,000 live births and fetal deaths increased slightly from 5.4/1,000 in 2011 to 5.7/1,000 in 2012 (**Figure 1C-2, Table 1C-3**).

Early infant deaths accounted for 266 or 54.6 percent of the 487 perinatal deaths in 2012 (**Figure 1C-2**, **Table 1C-3**).

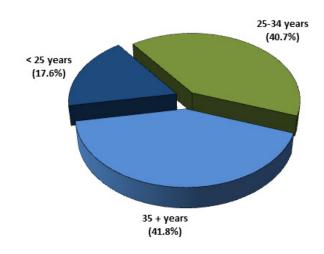
The fetal mortality rate of 5.5 fetal deaths at 20 or more weeks of gestation per 1,000 live births in 2012 was similar to rates reported from 2004 to 2011, while the actual number of reportable spontaneous fetal losses was lower than the numbers reported from 2002 – 2009. The number of spontaneous fetal losses in 2011 and 2012 (n = 470) was 6.1 percent greater than the 443 spontaneous fetal losses reported in 2010.

Notes: ^aRate is the number of events per 1,000 live births and fetal deaths. ^b Infant deaths of less than 7 days and fetal deaths with gestation of 28 weeks or more, per 1,000 live births and fetal deaths.

In 2012, 18 women giving birth were reported to have died from maternal causes (**Table 1C-1**). The number of maternal deaths does not include all deaths occurring to pregnant women, but only those deaths assigned to causes related to or aggravated by pregnancy or pregnancy management.

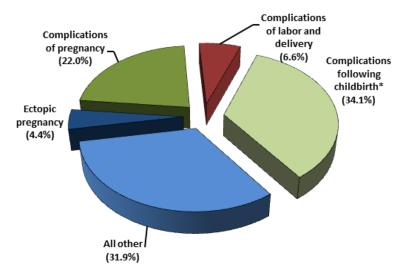
Based on the total number of 91 maternal deaths from 2002 to 2012, women age 35 and greater had the highest proportional contribution to maternal mortality (41.8 percent), followed by women age 25 - 34 (40.7 percent), and women age 24 and younger (17.6 percent; **Figure 1C-3**).

Figure 1C-3
Percent of Death from Maternal Causes by Mother's Age Group,
Arizona, 2002 - 2012



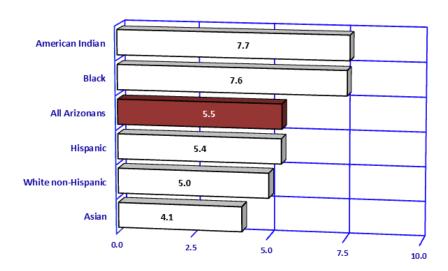
In the eleven-year period from 2002 to 2012, the major causes of maternal deaths in the State have included complications following childbirth (i.e. complications of the puerperium; 34.1 percent), complications mainly related to pregnancy (22.0 percent), complications occurring in the course of labor and delivery (6.6 percent), and ectopic pregnancy (4.4 percent). All other possible causes of maternal death accounted for 31.9 percent of the maternal deaths from 2002 to 2012 (Figure 1C-4, Table 1C-2).





Notes: ^a Based on the total number of maternal deaths from 2002 to 2012; * Complications of the puerperium.

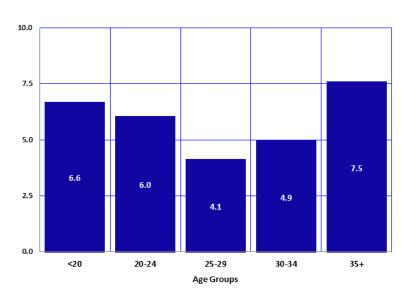
Figure 1C-5
Fetal Mortality Rates^a by Race/Ethnicity, Arizona, 2012



Fetal mortality rates vary by the race/ethnicity of the mother (Figure 1C-5). The fetal mortality rate for American Indian women was 7.7/1,000 live births and fetal deaths, the highest rate among the racial/ethnic groups. The 2012 fetal mortality rate was 7.6 for Black or African American women, 5.4 for Hispanic or Latino women, 5.0 for White non-Hispanic women, and 4.1 for Asian women. In 2011, Asian women had the highest fetal mortality rate in the state at 7.6/1,000 live births and fetal deaths. Given the low number of overall fetal mortality and the updated method of estimating the 2012 population denominators, this shift should be interpreted cautiously.

Note: ^a Rate is the number of fetal deaths per 1,000 live births and fetal deaths.

Figure 1C-6
Fetal Mortality Rates^a by Mother's Age Group, Arizona, 2012



Note: $^{\rm a}$ Rate is the number of fetal deaths per 1,000 live births and fetal deaths.

Fetal mortality rates also vary by maternal age (**Figure 1C-6**). In 2012, fetal mortality rates were lowest for women aged 25-29 years and highest for those aged 35 years and older. The fetal mortality rate for mothers age 35 and older increased by 8.7 percent from 2011.