

# Pregnancy-Associated Deaths in Stark County 2008-2016

These data summarize the findings of pregnancy-associated deaths to Stark County residents during 2008-2016 that were identified by the Ohio Department of Health's (ODH) Pregnancy-Associated Mortality Review (PAMR) and are intended to supplement the statewide report [A Report on Pregnancy-Associated Deaths in Ohio 2008-2016](#).

**Table 1. Stark County and Ohio Pregnancy-Associated Deaths by Pregnancy-Relatedness, 2008-2016**

Pregnancy-Relatedness	# Stark County Deaths	Stark County Mortality Ratio*	# OH Deaths	OH Mortality Ratio*
Pregnancy-Associated (Total)	15	39.6	610	48.2
Pregnancy-Related	5	**	186	14.7
Pregnancy-Associated, but Not Related (due to a cause unrelated to pregnancy)	8	**	368	29.1
Pregnancy-Associated, but Unable to Determine Pregnancy-Relatedness	2	**	56	4.4

\*Deaths per 100,000 live births \*\*Ratios are suppressed when the numerator is less than 10 Resident live births source: ODH Bureau of Vital Statistics, Ohio Resident Live Birth File

**Table 2. Stark County Pregnancy-Associated Deaths, by Demographics, 2008-2016**

Demographic Characteristic	# of Deaths
<b>Race/Ethnicity</b>	
Black, non-Hispanic	3
White, non-Hispanic	11
Other, non-Hispanic	1
<b>Age Group</b>	
Younger than 20 years	2
20-24 years	3
25-29 years	3
30-34 years	2
35-44 years	5
<b>Source of Pay</b>	
Medicaid	13
Private Insurance	2
<b>Education Level</b>	
8th grade or less	1
9th-12th grade; no diploma	3
High school grad. or GED completed	7
Some college; no degree	2
Bachelor's degree	1
Master's degree	1
Total	15

ODH identified 15 deaths to female residents of Stark County who died from 2008 through 2016 whose deaths were temporally related to pregnancy (Table 1). These deaths occurred while a woman was pregnant or within one year following the end of pregnancy and were all considered pregnancy-associated. Thus, during this period, the pregnancy-associated mortality ratio for Stark County was 39.6 per 100,000 live births, compared with 48.2 in all of Ohio during this same time period. PAMR determined 5 of the 15 deaths to be pregnancy-related; 8 were pregnancy-associated but not related. For the remaining 2 deaths, PAMR was unable to make a determination on pregnancy-relatedness.

Table 2 displays the demographic characteristics of the women who died. Most women were white, had Medicaid insurance, had a high school diploma or equivalent education.

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**Table 3. Stark County Pregnancy-Associated Deaths by Underlying Cause of Death and Timing of Death in Relation to Pregnancy, 2008-2016\***

Characteristic	# of Deaths
<b>Timing of Death</b>	
Pregnant at the time of death	2
Pregnant within 42 days of death	4
Pregnant 43 to 365 days of death	9
<b>Total</b>	<b>15</b>
<b>Underlying Cause of Death*</b>	
Cardiomyopathy	2
Cardiovascular and Coronary Conditions	1
Homicide	2
Infections	1
Malignancies	1
Mental Health Conditions	3
Pulmonary Conditions	1
<b>Total</b>	<b>11</b>

\*Causes of death are displayed only for deaths that occurred during 2008-2014. Among the three reviewed Stark county, 2015-2016 pregnancy-associated deaths, the causes of death were cardiomyopathy (1), cardiovascular and coronary conditions (1), and unintentional injury (1).

Among the 15 women who died, 2 women were pregnant at the time of death, 4 had been pregnant within 42 days of death, and 9 had been pregnant within 43 to 365 days of death (Table 3). The underlying causes of death for deaths that occurred from 2008-2014 are displayed in Table 3. Deaths that occurred during 2015-2016, were not all fully reviewed because of the high volume of deaths to be reviewed in a single year.

The committee identified 55 unique contributing factors among the 14 reviewed, pregnancy-associated deaths. The types of factors identified and the level at which they operated (i.e., patient/family, provider, or system) are displayed in Table 4.

**Table 4. Contributing Factors Among 14 Reviewed Stark County Pregnancy-Associated Deaths, 2008-2016**

Factor Level	Factor Class	# of Occurrences
Patient/Family	Access/Financial	1
	Adherence	3
	Assessment	1
	Childhood Abuse/Trauma	3
	Chronic Disease	5
	Delay	2
	Knowledge	3
	Mental Health Conditions	5
	Social Support/Isolation	2
	Substance Use Disorder- Alcohol, Illicit/Prescription Drugs	4
	Tobacco Use	1
	Unstable Housing	1
	Violence	4
	Provider	Assessment
Communication		2
Continuity of Care/Care Coordination		2
Delay		2
Knowledge		3
Other		2
System	Access/Financial	2
	Communication	1
	Continuity of Care/Care Coordination	1
	Other	1