

Pregnancy-Associated Deaths in Franklin County 2008-2016

These data summarize the findings of pregnancy-associated deaths to Franklin 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. Franklin County and Ohio Pregnancy-Associated Deaths by Pregnancy-Relatedness, 2008-2016

Pregnancy-Relatedness	# Franklin County Deaths	Franklin County Mortality Ratio*	# OH Deaths	OH Mortality Ratio*
Pregnancy-Associated (Total)	68	40.8	610	48.2
Pregnancy-Related	27	16.2	186	14.7
Pregnancy-Associated, but Not Related (due to a cause unrelated to pregnancy)	34	20.4	368	29.1
Pregnancy-Associated, but Unable to Determine Pregnancy-Relatedness	7	**	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. Franklin County Pregnancy-Associated Deaths, by Demographics, 2008-2016

Demographic Characteristic	# of Deaths
Race/Ethnicity	
Black, non-Hispanic	27
White, non-Hispanic	27
Hispanic	6
Other	8
Age Group	
Younger than 20 years	4
20-24 years	21
25-29 years	18
30-34 years	13
35-44 years	12
Source of Pay	
Medicaid	42
Private Insurance	16
Other	10
Education Level	
8th Grade or Less	2
9th-12th grade; no diploma	15
High school grad. or GED completed	32
Some college; no degree	3
Associate Degree	4
Bachelor's Degree	5
Master's Degree	4
Doctorate or Professional Degree	2
Not Specified	1
Total	68

ODH identified 68 deaths to female residents of Franklin 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 Franklin County was 40.8 per 100,000 live births, compared with 48.2 in all of Ohio during this same time period. PAMR determined 27 of the 68 deaths to be pregnancy-related; 34 were pregnancy-associated but not related. For the remaining 7 deaths, PAMR was unable to make a determination on pregnancy-relatedness. The pregnancy-associated mortality ratio for Franklin County was 16.2 per 100,000 live births, compared with 14.7 in all of Ohio.

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

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

Characteristic	# of Deaths
Timing of Death	
Pregnant at the time of death	17
Pregnant within 42 days of death	24
Pregnant 43 to 365 days of death	27
Total	68
Underlying Cause of Death*	
Unintentional Injury	9
Homicide	8
Infections	5
Malignancies	5
Hemorrhage	4
Cardiovascular and Coronary Conditions	3
Seizure Disorders	3
Cerebrovascular Accidents	2
Pre-eclampsia and Eclampsia	2
Amniotic Fluid Embolism	1
Autoimmune Diseases	1
Embolisms	1
Liver and Gastrointestinal Conditions	1
Mental Health Conditions	1
Metabolic/Endocrine Conditions	1
Pulmonary Conditions	1
Unknown COD	1
Total	49

*Causes of death are displayed only for deaths that occurred during 2008-2014. Among the 14 reviewed Franklin County, 2015-2016 pregnancy-associated deaths, the causes of death were pre-eclampsia and eclampsia (3), unknown COD (3), cardiomyopathy (2), cardiovascular and coronary conditions (2), cerebrovascular accidents (1), embolisms (1), malignancies (1), and mental health conditions (1).

Among the 68 women who died, 17 women were pregnant at the time of death, 24 had been pregnant within 42 days of death, and 27 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 230 unique contributing factors among the 63 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 63 Reviewed Franklin County Pregnancy-Associated Deaths, 2008-2016

Factor Level	Factor Class	# of Occurrences
Patient/Family	Access/Financial	6
	Adherence	9
	Childhood Abuse/Trauma	2
	Chronic Disease	28
	Cultural/Religious	5
	Delay	14
	Environmental	2
	Knowledge	12
	Mental Health Conditions	9
	Other	6
	Social Support/Isolation	9
	Substance Use Disorder- Alcohol, Illicit/Prescription Drugs	8
	Tobacco Use	7
	Unstable Housing	1
	Violence	7
Provider	Access/Financial	12
	Assessment	8
	Clinical Skill/Quality of Care	10
	Communication	6
	Continuity of Care/Care Coordination	3
	Knowledge	4
	Other	2
	Referral	8
System	Access/Financial	11
	Clinical Skill/Quality of Care	3
	Communication	7
	Continuity of Care/Coordination	14
	Equipment/Technology	3
	Law Enforcement	1
	Outreach	5
	Other	1
	Personnel	6
	Policies/Procedures	1