

PMR UPDATE

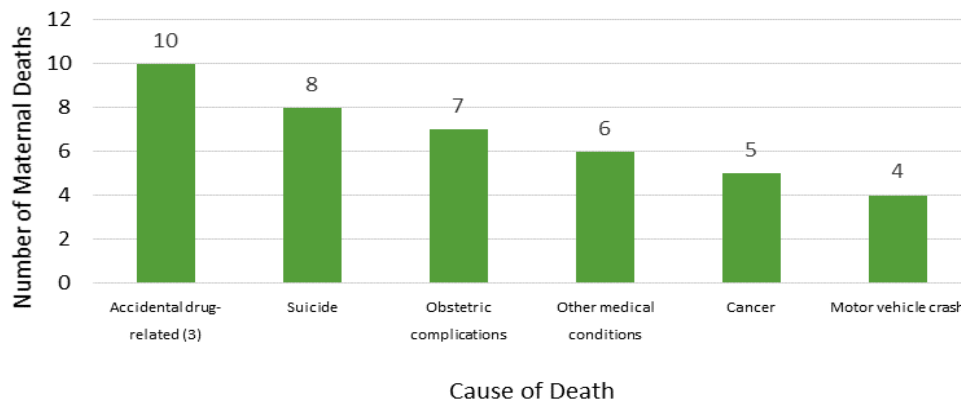
Maternal Mortality in Utah 2015-2016

There were 40 maternal deaths identified in Utah from 2015-2016. This included all deaths of women during pregnancy and within one year of the end of pregnancy from any cause. Of these, 26 were determined to be pregnancy-related,⁽¹⁾ and 14 were pregnancy-associated, but not related.⁽²⁾

Key Findings

- ◆ The leading categories for all causes of maternal death in Utah were accidental drug-related death (25%) and suicide (20%).
- ◆ A majority of maternal deaths (75%) were associated with a prior or current mental health condition.

Causes of Maternal Deaths in Utah
2015-2016



Source: Utah Vital Records Data

⁽¹⁾ A **pregnancy-related death** is defined as the death of a woman during pregnancy or within one year of the end of pregnancy from a pregnancy complication, a chain of events initiated by pregnancy, or the aggravation of an unrelated condition by the physiologic effects of pregnancy.

⁽²⁾ A **pregnancy-associated, but not related death** is the death of a woman during pregnancy or within one year of the end of pregnancy from a cause that is not related to pregnancy. <http://www.reviewtoaction.org/learn/definitions>

⁽³⁾ Accidental drug-related deaths include both illicit and non-illicit drugs as a major contributing factor.

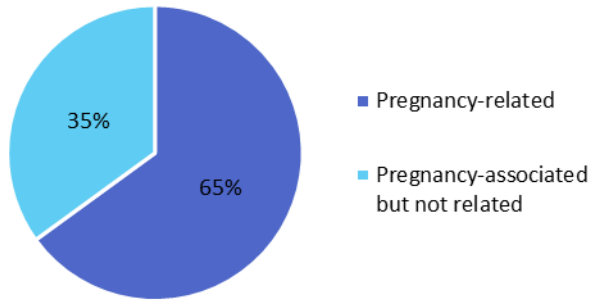
What is PMR?

The Utah Department of Health (UDOH) began its Perinatal Mortality Review (PMR) process in 1995. A committee of medical, public health, and mental health professionals volunteer to meet monthly to review infant and maternal deaths. The goal is prevention of such deaths by improving systems of care.

The committee reviews cases using information obtained from medical records, birth and death certificates, autopsy reports, and other sources. The UDOH ensures confidentiality of all information reviewed.

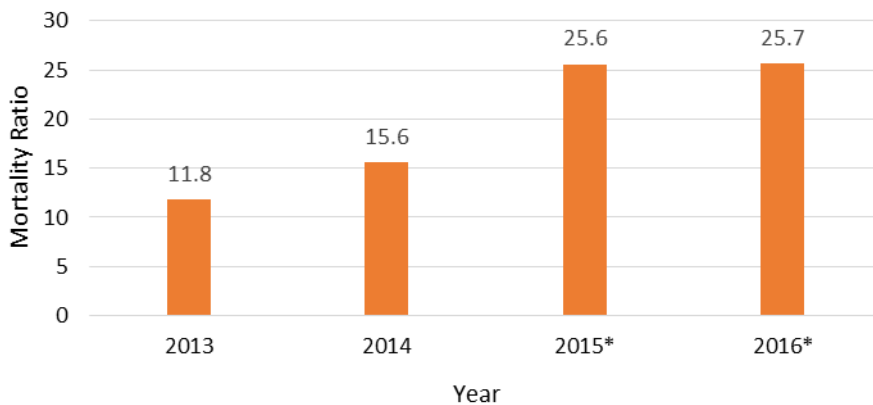
The committee uses a standardized form to consider each death for its pregnancy relatedness; preventability; and contributing factors at the patient, family, provider, facility, system, and community levels. Finally, the committee makes recommendations for public health actions and policy changes that could prevent future deaths.

Maternal Deaths by Pregnancy-Relatedness, Utah, 2015-2016



Source: Perinatal Mortality Review Data

Pregnancy-Related Mortality Ratio by Year, Utah, 2013-2016



Source: Perinatal Mortality Review Data

Maternal Deaths by Pregnancy-Relatedness:

The review committee determined that 65% of maternal deaths in 2015-2016 were pregnancy-related and 35% were pregnancy-associated, but not related.

Definition of Pregnancy-Related Mortality Ratio:

The number of **pregnancy-related** deaths during pregnancy and within one year of the end of pregnancy per 100,000 live births.

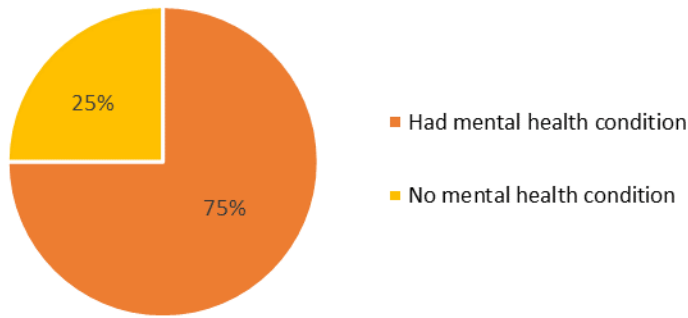
Year	Births to Utah Residents	Total Maternal Deaths	Pregnancy-Related Deaths	Pregnancy - Associated but not Related Deaths	Pregnancy Related Mortality Ratio
2013	50,914	19	6	13	11.8
2014	51,164	25	8	17	15.6
2015	50,776	23	13	10	25.6*
2016	50,486	17	13	4	25.7*

Source: Perinatal Mortality Review and Utah Vital Records Data

* Important note on pregnancy-relatedness:

The Utah Perinatal Mortality Review Committee made a decision to count accidental drug-related and suicide deaths as pregnancy-related because mental health conditions may be aggravated during pregnancy and the postpartum year. This has led to an increase in the number of pregnancy-related deaths, and subsequently, the pregnancy-related mortality ratio from 2015 onward.

Pre-existing Mental Health Condition, Utah, 2015-2016

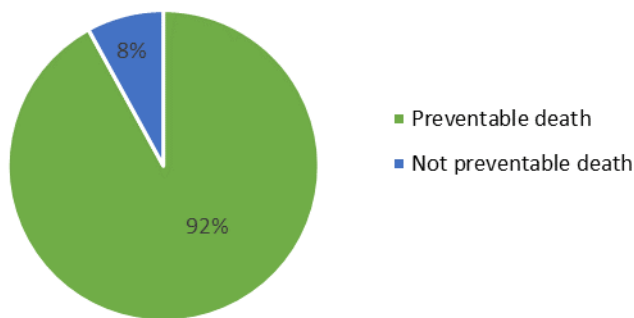


Source: Perinatal Mortality Review Data

Mental Health is a Key Factor

The leading causes of maternal death were accidental drug-related deaths and suicide, which are both associated with mental health conditions. Even if deaths were caused by obstetric or medical conditions, a significant number of those women had prior or current mental health conditions; depression and anxiety were the predominant diagnoses.

Preventability of Pregnancy-Related Deaths, Utah, 2015-2016



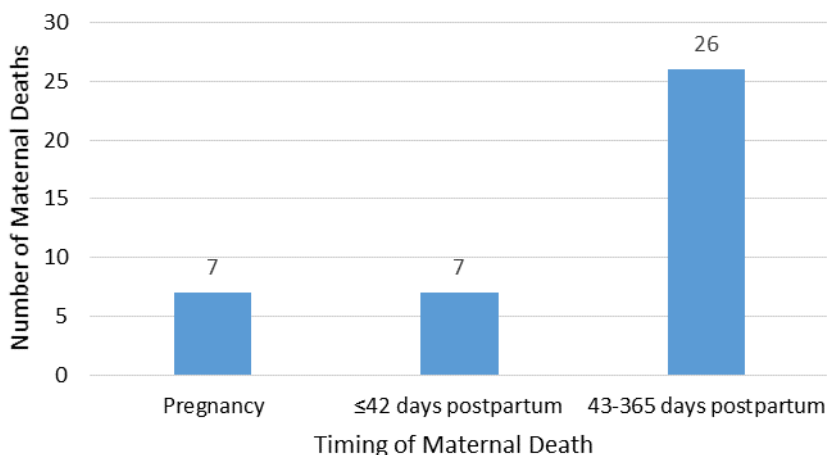
Source: Perinatal Mortality Review Data

Preventability

A death “is considered preventable if the committee determines that there was at least some chance of the death being averted by one or more reasonable changes to patient, family, provider, facility, system, and/or community factors.”

<http://reviewtoaction.org>

Timing of Maternal Deaths, Utah, 2015-2016



Source: Utah Vital Records Data

Timing of Deaths

Of the 40 maternal deaths in Utah from 2015-2016, seven occurred during pregnancy, seven occurred from birth to 42 days postpartum, and 26 occurred from 43 to 365 days postpartum. This finding supports the new recommendation from the American College of Obstetricians and Gynecologists that “postpartum care should become an ongoing process, rather than a single encounter, with services and support tailored to each woman’s individual needs.” (ACOG Committee Decision Number 736, May 2018)

Top contributing factors of maternal deaths in Utah from 2015-2016:

- ◆ Substance use disorder, including alcohol and tobacco (times cited: 18)
- ◆ Mental health conditions (16)
- ◆ Clinical skill/quality of care issues (15)
- ◆ Continuity of care/care coordination issues (12)

Notes on contributing factors:

- ◇ The PMR uses categories provided by the CDC.
- ◇ More than half of the clinical issues involved inadequate screening and treatment of Substance Use Disorder (SUD) and mental health conditions; the rest involved delay or inappropriate treatment of medical issues.
- ◇ Continuity of care issues involved previous medical records not being available or not reviewed by providers and having multiple providers with poor communication between them.

Top categories of recommendations made by the PMR committee:

- ◆ Increase access to services (times cited: 17)
- ◆ Coordination of care (10)
- ◆ Provider education (10)
- ◆ Public education (8)
- ◆ Naloxone availability (8)
- ◆ Increase postpartum follow up (7)

Specific recommendations:

- ◇ Expand access to outpatient treatment and inpatient detox facilities, especially in rural and southern Utah.
- ◇ Fund and develop peer support programs for SUD, perinatal psych units, a maternal mental health hotline, and programs similar to the University of Utah Substance Use in Pregnancy Recovery Addiction Dependence (SUPRAD) clinic.
- ◇ Improve communication and record sharing between hospitals and providers.
- ◇ Educate providers on screening, treatment, and resources for mental health and SUD, and encourage adoption of opioid prescribing guidelines.
- ◇ Educate the public on suicide warning signs and removal of lethal means such as firearms and drugs from the home.
- ◇ Educate the public on warning signs of postpartum complications.
- ◇ Ensure naloxone is readily available for people with current or previous SUD and for those who are prescribed opioids.
- ◇ Extend Medicaid coverage for one year postpartum.
- ◇ Provide in-home services for women at risk of pregnancy or postpartum complications, including tech options (virtual daily check-ins, etc.)
- ◇ Utilize pediatric providers for maternal mental health screening.

Provider Resources

TheEmilyEffect.org has a wealth of information and resources for the prevention and treatment of Perinatal Mood and Anxiety Disorders (PMADs).

St. Mark's Hospital offers an intensive outpatient program for the treatment of PMADs. More information is available at <https://stmarkshospital.com/service/perinatal-outpatient-program>.

The Utah chapter of Postpartum Support International offers local support and resources for women and training for professionals. More information is available at <https://www.psiutah.org/>.

To find local SUD and mental health treatment options, visit dsamh.utah.gov.

For opioid prescribing guidelines, visit <http://health.utah.gov/vipp/topics/prescription-drug-overdoses/healthcare.html>.

The University of Utah **SUPRAD** clinic specializes in care for pregnant women with substance addictions. Call 801-581-8425 for more information.

The Northern New England Perinatal Quality Improvement Network has a toolkit for perinatal care of women with opioid use disorders. More information is available at <http://www.nnepqin.org/clinical-guidelines/>.

The Ohio Maternal Opiate Medical Supports (MOMS) program has a variety of training tools and algorithms for care on their website. More information is available at momsOhio.org/moms/.

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