



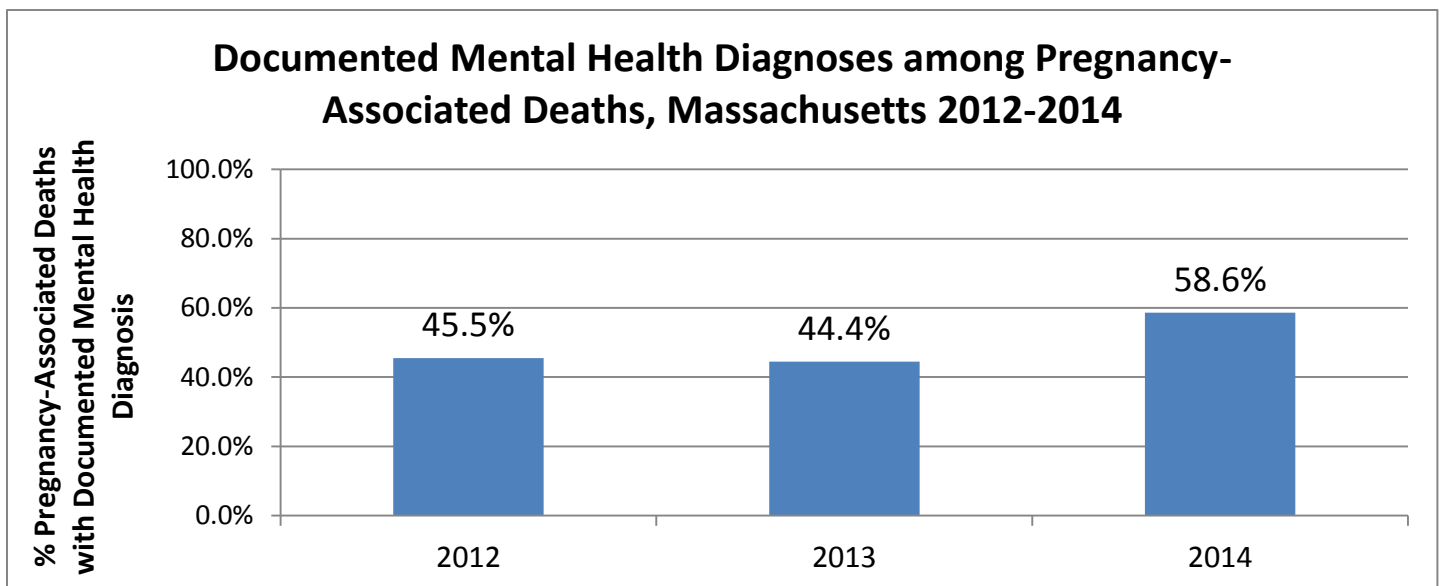
Maternal Mental Health & Pregnancy-Associated Deaths

Massachusetts Department of Public Health

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Pregnancy-associated mortality, the death of a woman while pregnant or within one year of termination of pregnancy, irrespective of cause, increased 33% in Massachusetts from 30.4 deaths/ 100,000 live births in 2012 to 40.4 deaths per 100,000 live births in 2014. Pregnancy-associated mortality ratios have been historically low in Massachusetts. This increase in the number of deaths along with the outcomes of Committee reviews was concerning and prompted the Massachusetts Maternal Mortality and Morbidity Review Committee (MMMMRC) to examine the incidence of mental health diagnosis among pregnancy-associated deaths during 2012-2014. The MMMMRC abstracted and reviewed all 69 pregnancy-associated death files from 2012-2014, including information from birth records, death records, additional medical records, police reports and social media sites.

- **More than half (50.7% (35/69)) of pregnancy-associated deaths had a documented mental health diagnosis**
- **The majority (91.4% (32/35)) of mental health diagnoses were documented prior to delivery**



- **The most common mental health diagnoses were depressive disorder, 57.1% (20/35), and anxiety disorder, 51.4% (18/35)**

Most Common Mental Health Diagnoses	N	%
Depressive Disorder	20	57.1
Anxiety Disorder	18	51.4
History of Postpartum Depression in Prior Pregnancy	6	17.1
Posttraumatic Stress Disorder	6	17.1
Bipolar Disorder	6	17.1

Summary:

During 2012–2014 in Massachusetts, documentation of at least one mental health diagnosis was identified through record abstraction in over half of all pregnancy-associated deaths. In a majority of cases, mental health diagnoses were present before delivery, indicating opportunities for intervention by prenatal and primary care providers. Depressive and anxiety disorders were the most common mental health diagnoses. Maternal depressive disorder can have adverse effects on maternal health and child development, including reduced maternal-infant attachment, sleep disruption, recurring and intrusive negative thoughts, suicidal ideation, and increased substance use. Factors that can place mothers at risk for maternal depression include prior history of depression, family history of depression, hormonal changes experienced during pregnancy, genetics, domestic violence, poor environment (e.g., food insecurity, poor housing conditions, lack of financial supports, uninvolved husband or partner), and the absence of a community network.

Implications for Obstetric and Primary Care Providers:

Obstetric and primary care providers serving pregnant and postpartum women are uniquely positioned to intervene effectively by screening and assessing women for mental health disorders and referring women to appropriate treatment. Several national organizations have recommended screening including:

- The US Preventative Services Task Force “recommends screening for depression in the general adult population, including pregnant and postpartum women.” ([USPSTF Final Recommendation Statement, Depression in Adults: Screening](#))
- The American Congress of Obstetricians and Gynecologists (ACOG) “recommends clinicians screen patients at least once during the perinatal period for depression and anxiety symptoms using a standardized, validated tool” ([ACOG Committee Opinion, Screening for Perinatal Depression](#))

Local Resources:

- *The Massachusetts Department of Public Health* webpage on postpartum depression includes information and resources for providers, mothers and their families: <http://www.mass.gov/eohhs/gov/departments/dph/programs/family-health/postpartum-depression/>
- *MCPAP for Moms* provides training, real-time psychiatric consultation and care coordination for providers serving pregnant and postpartum women: <https://www.mcpapformoms.org/>
- *MassHealth* covers the administration of standardized depression screening during pregnancy and the postpartum period: <http://www.mass.gov/eohhs/docs/masshealth/transletters-2016/phy-148.pdf>
- *The Postpartum Depression (PPD) Regulation* (105 CMR 271.000) requires annual reporting by a provider that conducts or oversees screening for PPD, using a validated screening tool, during a routine clinical appointment in which medical services are provided to a woman who has given birth within the previous six months. The regulation also applies to a carrier that receives a claim for this PPD screening: <http://www.mass.gov/eohhs/gov/departments/dph/programs/family-health/postpartum-depression/information-for-providers.html>

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References

American College of Obstetricians and Gynecologists. Screening for perinatal depression: Committee Opinion No.630. *Obstetrics & Gynecology*. 2015;125:1268-71.

Siu AL, United States Preventative Services Task Force. Screening for depression in adults: US Preventative Task Force recommendation statement. *JAMA*. 2016; 315(4):380-387. doi:10.1001/jama.2015.18392

World Health Organization. Millennium Development Goal 5: Improving maternal health: Improving Maternal Mental Health (2003). Geneva, Switzerland: World Health Organization Department of Mental Health and Substance Abuse.

Prevalence

Bennett HA, Einarson A, Taddio A, Koren G, Einarson TR. Prevalence of Depression During Pregnancy: Systematic Review. *Obstet Gynecol*. 2004;103:698-709.

Gaynes BN, Gavin N, Meltzer-Brody S, Lohr KN, Swinson T, Gartlehner G, Brody S, Miller WC. Perinatal depression: prevalence, screening accuracy, and screening outcomes. Summary, Evidence Report/Technology Assessment. 2005;No. 119. AHRQ Publication No. 05-E006-1. Rockville, MD: Agency for Healthcare Research and Quality.

Wisner KL, Sit D, McShea MC, Rizzo DM, Zoretich RA, Hughes CL, Eng HF, Luther JF, Wisniewski SR, Costantino ML, Confer AL, Moses-Kolko EL, Famy CS, Hanusa BH. Onset timing, thoughts of self-harm, and diagnoses in postpartum women with screen-positive depression findings. *JAMA Psychiatry*. 2013;70(5):490-498.

Impact on Mom, Infant and Family

Accort EE, Cheadle ACD, Svhetter CD. Prenatal depression and adverse birth outcomes. *Matern Child health J*. 2015. 19:1306-1337.

Community Catalyst. Maternal depression: Implications for parents and children and opportunities for policy change. Community Catalyst Issue Brief. August 2015

McLearn KT, Minkovitz CS, Strobino, DM, Marks E, Hou, W. Maternal depressive symptoms at 2 to 4 months postpartum and early parenting practices. *Archives of Pediatrics & Adolescent Medicine*. 2006;160:3, 279-284.

Farr SL, Dietz PM, Rizzo JH, Vesco KK, Callaghan WM, Bruce FC, Bulkley JE, Hornbrook MC, Berg CJ. Health care utilisation in the first year of life among infants of mothers with perinatal depression or anxiety. *Paediatr Perinat Epidemiol*. 2013 January ; 27(1): 81–88. doi:10.1111/ppe.12012.

Screening

Gjerdingen DK, Yawn, BP. Postpartum depression screening: importance, methods, barriers, and recommendations for practice. *J Am Board Fam Med*. 2007; 20:3;280-288.

Miller L, Shade M, Vasireddy V. Beyond screening: assessment of perinatal depression in a perinatal care setting. *Archives of Women's Mental Health*. 2008;12:329-334.

Miller LJ, Gupta R, Scremin AM. The evidence for perinatal depression screening and treatment. In Handler A, Kennelly J, Peacock N, eds: *Reducing Racial/Ethnic Disparities in Reproductive and Perinatal Outcomes: The Evidence from Population-Based Interventions*. Springer: New York, 2011, pp. 301-327.

Woolhouse H, Gartland D, Mensah F, Brown SJ. Maternal depression for early pregnancy to 4 years postpartum in a prospective pregnancy cohort study: implications for primary health care. *BJOG* 2014; DOI: 1111/1471-0528.12837.