With more recent published guidance, public health nurses are increasingly screening for Perinatal Mood and Anxiety Disorders (PMAD) in home visitation and clinical settings. New evidence shows that maternal mental illness is a more common health concern than previously thought, and that many cases of what has been called postpartum depression, actually started during the pregnancy. Left untreated, this can be detrimental to the well-being of both the mother and child. As stated by Dr. Michael Pignone, a professor of medicine at the University of North Carolina at Chapel Hill and an author of recommendations issued by the United States Preventive Services Task Force, “there’s better evidence for identifying and treating women with depression during and after pregnancy”, thus “we specifically called out the need for screening during this period.”

Listed below are links to research articles, recommendation statements, and resources that support screening in a number of different settings, by varying levels of providers, working collaboratively to provide an adequate system of care that ensures accurate diagnosis, effective treatment, and appropriate follow-up. It is the role of public health providers in Kansas to work with partnering agencies/providers at the local community level to provide this circle of care. “Screening must exist in a system of care that includes educated providers, social support for families, and a protocol to follow up with those who have screened above the cut-off score on an evidence-based screening tool, aligned with the American College of Obstetricians and Gynecologists (ACOG) and US Preventive Services Task Force (USPSTF) recommendations.” (Postpartum Support International, Screening Recommendations)

Research/Resources Supporting Screening in Different Settings

- US Preventive Services Task Force Recommendation Statement
  (For a nice summary of the above recommendations, see this article in the New York Times)

- Postpartum Support International - Screening Recommendations
  - [www.postpartum.net/learn-more/screening](http://www.postpartum.net/learn-more/screening)

- AAP news article on ruling on Medicaid coverage of maternal depression screening during well-child visits
  - [www.aappublications.org/news/2016/06/21/MaternalDepression062116](http://www.aappublications.org/news/2016/06/21/MaternalDepression062116)

- “Depression in Mothers – More Than the Blues” – toolkit for Family Service Providers, by SAMHSA

- Information for Health Professionals (Minnesota Department of Health)
  - [www.health.state.mn.us/divs/cfh/topic/pmad/professionals.cfm](http://www.health.state.mn.us/divs/cfh/topic/pmad/professionals.cfm)

- Information for Family Home Visiting (Minnesota Department of Health)
  - [www.health.state.mn.us/divs/cfh/topic/pmad/familyvisiting.cfm](http://www.health.state.mn.us/divs/cfh/topic/pmad/familyvisiting.cfm)
Introduction to Algorithms for Perinatal Screening in MCH Services

Public health providers across MCH programs can (and should) serve a unique role in screening, referring, and providing follow-up to our perinatal women and their infants/children. We feel with the appropriate training and resources, and support of local clinical partners, screening can be done in public health settings. Tools to assist public health/MCH staff in decision-making when positive screens are identified can be useful in providing the best outcome. Algorithms can be used to address the results of screening for PMAD and/or response to a mental health crisis by offering staff guidance on appropriate responses to various results of screening and have therefore been developed (adapted with permission from the Minnesota Department of Health) as part of the Perinatal Mental Health Integration Toolkit associated with this document.

Background
Depression is the leading disability in women and 15-20% of women feel moderate to severe depression or anxiety during the periods of pregnancy and/or postpartum (ACOG, 2010). These women are not limited to a particular culture, race, age, income or education level. No single cause has been identified for depression or anxiety during pregnancy or postpartum, however there are several factors linked to the development of these conditions.

Key Factors
- History of depression, anxiety or other mental health concerns
- Stress
- Hormone changes
- History of trauma
- Lack of or poor support
- Family history
- Other stressful experiences (MDH, 2014).

Other factors that may place a woman at risk for perinatal depression
- History of emotional support from own mother
- Perceived level of support after the birth of the baby
- Life stresses in the last 12 months
- Personality style (esp. presence of anxious or perfectionistic traits)
- History of abuse (emotional, sexual or physical)
- History of mental health or substance abuse issues
- Current scoring on PHQ-9 or EPDS
- General physical health
- Amount of sleep
- Financial stresses
- Maternal feelings towards the pregnancy and baby (Johnson et al, 2012)

Infants are understood in the context of their primary caregiving relationships; best practice in public health addresses the parent/child pair, as well as the family as a whole. A caregiver experiencing depressive symptoms may have difficulty responding adequately to the infant or child, and the child's development, both emotional and physical, may therefore be at risk.

Infants of mothers with diagnosed depressive disorders have shown delays in cognitive, neurologic, psychological and motor development. It has also been seen that children with mental and behavior disorders whose mothers are depressed show improvement in behaviors when their mother's depressive symptoms are in remission. Partners of the depressed woman also suffer with increased rates of depression. For these reasons, it is critical to identify women with depression through screening in order to encourage prompt diagnosis and treatment (ACOG, 2010).
Description of the algorithms
Two algorithms have been developed to offer appropriate responses to screening results of the Edinburgh Postpartum Depression Scale (EPDS). One of the algorithms is a crisis response algorithm for use when it is found that a woman is currently at risk of causing harm to herself or others. The other algorithm is to assist in the detection of postpartum depression in mothers.

These algorithms are templates offered for use in your agency as guides and can be customized to meet your individual agency needs. Resources and needs vary by individual communities and protocols for referral and follow-up vary by agencies and providers. These documents are provided as editable documents to allow modification or addition of individual protocol and resources.

It is important that your agency or community develop individual procedures and/or protocol for responding to various situations using the unique resources available in your community. Also, with the implementation of PMAD screening, staff should receive educational training on PMAD to increase their understanding of this issue and to improve skill and comfort level when responding to mothers who score positively on the screening tool. To assist with this, an Edinburgh Postnatal Depression Scale Tip Sheet has been adapted and included as a resource in the associated toolkit.

It is hoped that these algorithms, as well as other resources provided to you in the Perinatal Mental Health Integration Toolkit, will be helpful to you as you work to advance the mental health care of the families you serve.

Recommended Screening Tool
Both the Edinburgh Postnatal Depression Scale (EPDS) and the Patient Health Questionnaire-9 (PHQ-9) are evidence-based screening tools that are validated for use in the perinatal population. They are both available in multiple languages. The EPDS addresses the anxiety component of perinatal mood and anxiety disorders (PMADs) as well as depressive symptoms and suicidal thoughts, whereas the PHQ-9 does not have the anxiety component. With anxiety being recognized as one of the presenting symptoms of PMAD it becomes important that it be assessed in the screening tool, making the EPDS the most widely used tool (“Screening for Perinatal Depression – ACOG,” 2015). Many research studies and publications encourage use of the EPDS as a standard perinatal depression screening measure as it continues to demonstrate strong reliability and validity. The US Preventive Services Task Force (USPSTF) Recommendation Statement cites studies demonstrating high sensitivity and positive predictive value for detecting a major depressive disorder (MDD) for the EPDS, whereas no studies of screening in pregnant and postpartum women with the PHQ-9 or other versions met inclusion criteria. For these reasons, the Kansas Department of Health and Environment (KDHE) Bureau of Family Health (BFH) is promoting use of the EPDS across MCH services in the state. The EPDS has been incorporated into the Perinatal Mental Health Integration Toolkit resources and is included as a screening tool among forms in DAISEY, the bureau’s data management system. Kansas MCH providers are encouraged to use this form in DAISEY.

Who Should Screen
Universal maternal mental health screening in prenatal, postnatal, and pediatric settings is recommended. Settings may include but are not limited to: health care providers (primary care, OB, midwifery, and pediatric), public health, addictions and mental health, community social services, and early childhood programs (Postpartum Support International, Screening Recommendations). These recommendations are also supported by the USPSTF, as they recommend screening be implemented with adequate systems of care in place consisting of a wide range of different levels of clinician types (citing the lowest effective level of support consisting of a designated nurse who advised physicians of positive screening results). Today’s recommendations focus on having systems in place that assure routine screening occurs, and when positive, referrals are then made to the appropriate level of clinician to assure diagnosis and treatment.
**Who to Screen**

“The USPSTF found adequate evidence that programs combining depression screening with adequate support systems in place improve clinical outcomes in adults, including pregnant and postpartum women” and therefore recommends screening women prenatally as well as in the postpartum period (January 26, 2016 USPSTF Recommendation Statement, Screening for Depression in Adults). Current recommendations by the task force omitted previous recommendations around “selective screening” and now promote universal screening when adequate systems of care are in place. As indicated above, the current statement specifically recommends screening for depression in pregnant and postpartum women, subpopulations that were not included in previous reviews and recommendations.

**When to Screen**

It is recommended that local agencies develop protocol identifying key opportunities for screening based on services provided by each of the collaborative partners/agencies in the community’s system of care (including home visiting, WIC, and other MCH services), aligning with recommendations* by the following organizations advocating for the highest standards of practice:

- American Academy of Family Physicians – recommends screening for depression in the general adult population, including pregnant and postpartum women
- American Academy of Pediatrics – recommends pediatricians screen postpartum mothers at the infant’s 1, 2, and 4 month visits
- American College of Preventive Medicine – recommends primary care clinicians screen all adults
- American College of Obstetricians and Gynecologists – recommends clinicians screen patients at least once during the perinatal period
- Postpartum Support International – recommends screening at the following times:
  - First prenatal visit
  - At least once in the second trimester
  - At least once in the third trimester
  - Six-week postpartum obstetrical visit (or at first postpartum visit)
  - Repeated screening at 6 and/or 12 months in OB and primary care settings
  - 3, 9, and 12 month pediatric visits

*All recommendations include assuring adequate systems of care are in place

**Provider Consult**

A consultation line is available for medical providers who may have additional questions about the overall screening process, or who feel they may benefit from the guidance of fellow medical professionals on the treatment of patients on a case-by-case basis. The Perinatal Psychiatric Consult Line is staffed by reproductive psychiatrists who are members of PSI and specialize in the treatment of perinatal mental health disorders. The service is free, available by appointment and can be accessed at: [https://www.postpartum.net/professionals/perinatal-psychiatric-consult-line/](https://www.postpartum.net/professionals/perinatal-psychiatric-consult-line/)

**References**


Postpartum Support International, Screening Recommendations. [www.postpartum.net/learn-more/screening](http://www.postpartum.net/learn-more/screening)