South Carolina Department of Public Health:
Measles in Pregnancy
Clinical Reference for Obstetric Providers

Purpose

South Carolina is experiencing an active measles outbreak. This quick-reference guide supports obstetric providers in measles prevention and management across the pregnancy continuum. Complications from measles can be severe during pregnancy. During this outbreak DPH has identified several pregnant women with measles. MMR vaccination is not recommended during pregnancy. There is urgent need to increase protection against measles in women of childbearing age through vaccination prior to pregnancy. Reduction of complications during pregnancy is achieved with administration of immune globulin as post-exposure prophylaxis.

Why Measles Matters in Pregnancy

- **Measles is a highly contagious airborne viral illness**
- Infection during pregnancy is associated with **severe maternal illness** and **adverse pregnancy outcomes** including fetal demise
- **Measles can be transmitted to the fetus,** resulting in congenital measles and severe neonatal complications.
- **Post-exposure prophylaxis (PEP) is effective** and can prevent or attenuate disease

What Can Providers Do?

- **Assess and document measles immunity at the initial prenatal visit**
  Presumptive immunity includes any one of the following:
  - Documented MMR vaccination (2 doses recommended for women of childbearing age)
  - Measles IgG titer positive
  - Laboratory-confirmation of prior measles infection

- **Vaccinate susceptible patients who are eligible**
  - **Pre-pregnancy:** Initiate 2-dose MMR series. Delay pregnancy ≥4 weeks after vaccination
  - **Pregnant:** The MMR is a live-attenuated vaccine and is contraindicated in pregnancy. If administered inadvertently, risk of adverse events is theoretical
  - **Postpartum**: Initiate 2-dose MMR series prior to hospital discharge. MMR is safe with breastfeeding

- **Offer PEP to susceptible patients after measles exposure** (contact without PPE with a measles case or shared airspace during or within 2 hours)
  - Pregnant: IVIG 400 mg/kg IV within 6 days of exposure. Quarantine for 21 days is still recommended if exposed by a household member or close contact
  - Non-pregnant (including postpartum): MMR within 72 hours of exposure *or* immunoglobulin within 6 days for those with contraindications to MMR.
  - If immunoglobulin is given, delay MMR vaccination for 8 months

- Vitamin A is not effective for measles prevention. Pregnant woman should not exceed the recommended dietary allowance for vitamin A during pregnancy.

- **Act immediately if measles is suspected**
  - Notify South Carolina DPH Immediately
  - Isolate the patient using airborne precautions
  - Test promptly. Measles RT-PCR (nasopharyngeal or throat swab) preferred
  - Do not delay reporting to DPH while awaiting test results
  - Counsel the patient on isolation/quarantine while awaiting testing results or if monitoring for symptoms after exposure

- **Provide clinical management for confirmed cases**
  - Supportive care: antipyretics, fluids, and management of complications (e.g. pneumonia, respiratory failure)
  - Do not recommend supplemental Vitamin A in pregnancy unless dietary deficiency is suspected.
  - Neonates born to an infectious mother should receive PEP. Use shared decision-making regarding rooming-in with the newborn. Consider masking in the room
  - Breastfeeding is not contraindicated. Counsel on safe practices to reduce transmission, including masking

To Learn More About Measles in Pregnancy:

Society for Maternal-Fetal Medicine
American College of Obstetricians & Gynecologists
Centers for Disease Control & Prevention
South Carolina Department of Public Health