



SMFM Update on Human Parvovirus B19 in Pregnancy

August 27, 2024

This guidance was developed by the Society for Maternal-Fetal Medicine Committee on Infectious Diseases and Emerging Threats with the assistance of Naima Joseph, MD, MPH; Brenna Hughes, MD, MSc; Martina Badell, MD; and Russell S. Miller, MD.

On August 13, 2024, the Centers for Disease Control and Prevention (CDC) issued a [Health Alert Network \(HAN\) Health Advisory](#) (CDC HAN) to notify healthcare providers, public health authorities, and the public about recent increases in human parvovirus B19 activity in the United States.¹

The Society for Maternal-Fetal Medicine (SMFM) continues to monitor the human parvovirus B19 activity closely and will provide updated guidance as necessary. The following are interim clinical considerations.

Introduction

Parvovirus B19 is a seasonal respiratory virus transmitted through respiratory droplets by people with symptomatic or asymptomatic infection.¹ Acute parvovirus B19 infection during pregnancy can be associated with adverse fetal outcomes, including severe fetal anemia, nonimmune hydrops, and fetal demise.¹ People who are immunocompromised or have certain blood disorders (eg, sickle cell disease) can face serious complications, including transient aplastic crises, encephalitis or other neurologic manifestations, and myocarditis.^{1,2}

Screening, Testing and Treatment

Although routine screening for parvovirus B19 immunity is not recommended during pregnancy, maternal-fetal medicine subspecialists and other obstetric care clinicians should consider serologic testing in the following situations^{1,2}:

- Pregnant people who present with symptoms compatible with parvovirus B19 infection (ie, fever, myalgia, malaise, reticular rash, and/or arthralgia following a viral illness);
- Pregnant people with suspected fetal anemia or nonimmune hydrops; or
- Asymptomatic pregnant people following confirmed exposure to parvovirus B19.

Immune patients (positive result for immunoglobulin G (IgG) antibody and negative result for immunoglobulin M (IgM) antibody) can be counseled regarding protective immunity and the unlikely risk of adverse fetal outcomes.³ Nonimmune patients (negative results for both IgG and IgM antibodies) can be monitored for symptom development or seroconversion.³ Treatment for acute infection in the pregnant individual is supportive, and management includes monitoring for

and treating severe fetal anemia.^{1,4} Currently, there is no available vaccine to prevent parvovirus B19 infection.¹

Prevention

Maternal-fetal medicine subspecialists and other obstetric care clinicians should provide counseling stressing the importance of core prevention strategies^{4,5} including:

- Wearing a mask;
- Handwashing;
- Cleaning frequently touched surfaces;
- Limiting physical contact with sick people;
- Avoiding sharing food and drink, and
- Covering coughs and sneezes.

References

1. Centers for Disease Control and Prevention. Health Alert Network. Increase in Human Parvovirus B19 Activity in the United States. August 13, 2024. <https://emergency.cdc.gov/han/2024/han00514.asp>. Accessed August 27, 2024.
2. Centers for Disease Control and Prevention. About Parvovirus B19. August 13, 2024. <https://www.cdc.gov/parvovirus-b19/about/index.html>. Accessed August 27, 2024.
3. American College of Obstetricians and Gynecologists. Practice bulletin no. 151: Cytomegalovirus, parvovirus B19, varicella zoster, and toxoplasmosis in pregnancy. *Obstet Gynecol.* 2015 Jun;125(6):1510-1525. doi: 10.1097/01.AOG.0000466430.19823.53. Erratum in: *Obstet Gynecol.* 2016 Feb;127(2):405.
4. Centers for Disease Control and Prevention. Parvovirus B19 in pregnancy. August 13, 2024. <https://www.cdc.gov/parvovirus-b19/about/parvovirus-b19-in-pregnancy.html>. Accessed August 27, 2024.
5. Centers for Disease Control and Prevention. Preventing Respiratory Viruses. Core Prevention Strategies. March 1, 2024. <https://www.cdc.gov/respiratory-viruses/prevention/index.html>. Accessed August 27, 2024.

Suggested Citation: Society for Maternal-Fetal Medicine (SMFM). SMFM Update on Parvovirus B19; Washington, DC: SMFM. 2024. Available at: <https://www.smfm.org/parvovirus-b19>. Retrieved [enter date].