Summary of Recommendations

The U.S. Preventive Services Task Force (USPSTF) strongly recommends Rh (D) blood typing and antibody testing for all pregnant women during their first visit for pregnancy-related care.

A recommendation.

The USPSTF found good evidence that Rh (D) blood typing, anti-Rh (D) antibody testing, and intervention with Rh (D) immunoglobulin, as appropriate, prevents maternal sensitization and improves outcomes for newborns. The benefits substantially outweigh any potential harms.

The USPSTF recommends repeated Rh (D) antibody testing for all unsensitized Rh (D)-negative women at 24–28 weeks’ gestation, unless the biological father is known to be Rh (D)-negative.

B recommendation.

The USPSTF found fair evidence that repeated antibody testing for unsensitized Rh (D)-negative women (unless the father is also known to be Rh [D]-negative) and intervention with Rh (D) immunoglobulin, as appropriate, provides additional benefit over a single test at the first prenatal visit in preventing maternal sensitization and improving outcomes for newborns. The benefits of repeated testing substantially outweigh any potential harms.

The USPSTF found no new evidence addressing the role of screening, new screening tests, new treatment protocols, or potential harms associated with screening and treatment of Rh (D) incompatibility. However, there is pre-existing good evidence for the efficacy and effectiveness of blood typing, anti-Rh (D) antibody screening, and postpartum Rh (D) immunoglobulin prophylaxis.

Corresponding Author: Ned Calonge, MD, MPH, Chair, U.S. Preventive Services Task Force, c/o Program Director, USPSTF, Agency for Healthcare Research and Quality, 540 Gaither Road, Rockville, MD 20850, e-mail: uspstf@ahrq.gov.
Clinical Considerations

- Administration of a full (300µg) dose of Rh (D) immunoglobulin is recommended for all unsensitized Rh (D)-negative women after repeated antibody testing at 24–28 weeks’ gestation.

- If an Rh (D)-positive or weakly Rh (D)-positive (eg, D⁺-positive) infant is delivered, a dose of Rh (D) immunoglobulin should be repeated postpartum, preferably within 72 hours after delivery. Administering Rh (D) immunoglobulin at other intervals after delivery has not been studied.

- Unless the biological father is known to be Rh (D)-negative, a full dose of Rh (D) immunoglobulin is recommended for all unsensitized Rh (D)-negative women after amniocentesis and after induced or spontaneous abortion; however, if the pregnancy is less than 13 weeks, a 50 µg dose is sufficient.

- The benefit of routine administration of Rh (D) immunoglobulin after other obstetric procedures or complications such as chorionic villus sampling, ectopic pregnancy termination, cordocentesis, fetal surgery or manipulation (including external version), antepartum placental hemorrhage, abdominal trauma, antepartum fetal death, or stillbirth is uncertain due to inadequate evidence.

References


Screening for Rh (D) Incompatibility: USPSTF Recommendations

The Task Force grades its recommendations according to one of 5 classifications (A, B, C, D, I) reflecting the strength of evidence and magnitude of net benefit (benefits minus harms):

A. The USPSTF strongly recommends that clinicians provide [the service] to eligible patients. The USPSTF found good evidence that [the service] improves important health outcomes and concludes that benefits substantially outweigh harms.

B. The USPSTF recommends that clinicians provide [the service] to eligible patients. The USPSTF found at least fair evidence that [the service] improves important health outcomes and concludes that benefits outweigh harms.

C. The USPSTF makes no recommendation for or against routine provision of [the service]. The USPSTF found at least fair evidence that [the service] can improve health outcomes but concludes that the balance of benefits and harms is too close to justify a general recommendation.

D. The USPSTF recommends against routinely providing [the service] to asymptomatic patients. The USPSTF found at least fair evidence that [the service] is ineffective or that harms outweigh benefits.

I. The USPSTF concludes that the evidence is insufficient to recommend for or against routinely providing [the service]. Evidence that [the service] is effective is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

Appendix A
U.S. Preventive Services Task Force—Recommendations and Ratings

Appendix B
U.S. Preventive Services Task Force—Strength of Overall Evidence

The USPSTF grades the quality of the overall evidence for a service on a 3-point scale (good, fair, poor):

Good: Evidence includes consistent results from well-designed, well-conducted studies in representative populations that directly assess effects on health outcomes.

Fair: Evidence is sufficient to determine effects on health outcomes, but the strength of the evidence is limited by the number, quality, or consistency of the individual studies, generalizability to routine practice, or indirect nature of the evidence on health outcomes.

Poor: Evidence is insufficient to assess the effects on health outcomes because of limited number of power of studies, important flaws in their design or conduct, gaps in the chain of evidence, or lack of information on important health outcomes.

Members of the U.S. Preventive Services Task Force*

| Alfred O. Berg, MD, MPH, Chair, USPSTF (Professor and Chair, Department of Family Medicine, University of Washington, Seattle, WA) |
| Janet D. Allan, PhD, RN, CS, Vice-chair, USPSTF (Dean, School of Nursing, University of Maryland, Baltimore, Baltimore, MD) |
| Ned Calonge, MD, MPH (Acting Chief Medical Officer and State Epidemiologist, Colorado Department of Public Health and Environment, Denver, CO) |
| Paul S. Frame, MD (Family Physician, Tri-County Family Medicine, Cohocton, NY, and Clinical Professor of Family Medicine, University of Rochester, Rochester, NY) |
| Joel Garcia, MD, MBA (Deputy Director, Pan American Health Organization, Washington, DC) |
| Russell Harris, MD, MPH (Associate Professor of Medicine, Sheps Center for Health Services Research, University of North Carolina School of Medicine, Chapel Hill, NC) |
| Mark S. Johnson, MD, MPH (Professor and Chair, Department of Family Medicine, University of Medicine and Dentistry of New Jersey-New Jersey Medical School, Newark, NJ) |
| Jonathan D. Klein, MD, MPH (Associate Professor, Department of Pediatrics, University of Rochester School of Medicine, Rochester, NY) |
| Carol Loveland-Cherry, PhD, RN (Executive Associate Dean, School of Nursing, University of Michigan, Ann Arbor, MI) |
| Virginia A. Moyer, MD, MPH (Professor, Department of Pediatrics, University of Texas Health Science Center, Houston, TX) |
| C. Tracy Orleans, PhD (Senior Scientist, The Robert Wood Johnson Foundation, Princeton, NJ) |
| Albert L. Sia, MD, MSPH (Professor and Chairman, Brookdale Department of Geriatrics and Adult Development, Mount Sinai Medical Center, New York, NY) |
| Steven M. Teutsch, MD, MPH (Executive Director, Outcomes Research and Management, Merck & Company, Inc., West Point, PA) |

Carolyn Westhoff, MD, MSc (Professor of Obstetrics and Gynecology and Professor of Public Health, Columbia University, New York, NY)

Steven H. Woolf, MD, MPH (Professor, Department of Family Practice and Department of Preventive and Community Medicine and Director of Research, Department of Family Practice, Virginia Commonwealth University, Fairfax, VA)

*Members of the Task Force at the time this recommendation was finalized. For a list of current Task Force members, go to www.ahrq.gov/clinic/uspstfab.htm.