Agent	In-hospital Source	Potential Effect on the Fetus	Rate of Perinatal - Transmission	Maternal Screening	Prevention
Anthrax				History of exposure	Pre-pregnancy vaccination; vaccine not licensed for use in pregnancy Postexposure chemoprophylaxis with ciprofloxacin or amoxicillin if source
CMV	Urine, blood, semen, vaginal secretion, immunosuppressed transplant, dialysis, day care	Classic cytomegalic inclusion disease (5 to 10 percent)* Hearing loss (10 to 15 percent)	Primary infection (25 to 50 percent) Recurrent infants (52 percent) Symptomatic (<5 to 15 percent)	Routine screening not recommended; antibody is incompletely protective	Efficacy of CMV immune globulin not established No vaccine available Standard Precautions
HAV	Feces (most common), blood (rare)	No fetal transmission described; transmission may occur at the time of delivery if women still in the infectious phase and cause hepatitis	None	Routine screening not recommended	Vaccine is a killed viral vaccine and can safely be used in pregnancy. Contact Precautions during acute phase. The safety of Hepatitis A vaccination during pregnancy has not been determined; however, because the vaccine is produced from inactivated HAV, the theoretical risk to the developing fetus is expected to be low. The risk associated with vaccination, however, should be weighed against the risk for Hepatitis A in women who might be at high risk for exposure to HAV.
HBV	Blood, bodily fluids, vaginal secretions, semen	Hepatitis, early onset hepatocellular carcinoma	HbsAg + 10 percent HbeAg + 90 percent	Routine HBsAg testing advised	HBV vaccine during pregnancy Neonate: HBIG plus vaccine at birth Standard Precautions
HCV	Blood, sexual	Hepatitis	5 percent (0 to 25 percent)	Routine screening not recommended	No vaccine or immunoglobulin available; postexposure treatment with antiviral agents investigational

Agent	In-hospital Source	Potential Effect on the Fetus	Rate of Perinatal - Transmission	Maternal Screening	Prevention
					Standard Precautions
HSV	Vesicular fluid, oropharyngeal and vaginal secretions	Sepsis, encephalitis, meningitis, mucocutaneous lesions, congenital malformation (rare)	Primary genital (33 to 50 percent) Recurrent genital (1 to 2 percent)	Antibody testing minimally useful genital inspection for lesions if in labor	Chemoprophylaxis at 36 weeks decreases shedding Standard Precautions
HIV	Blood, bodily fluids, vaginal secretions, semen	No congenital syndrome. If fetus infected, AIDS in 2 to 4 years.	Depends on HIV viral titer If titer <1,000 virus; rate, 2 percent If titer ≥10,000; rate up to 25 percent	Routine maternal screening advised. If exposed, testing at 3, 6, and 12 months	Antiretroviral chemoprophylaxis available for exposures, postnatal chemoprophylaxis for HIV+ mothers and their infants Standard Precautions
Influenza	Sneezing and coughing, respiratory tract secretions	No congenital syndrome: Influenza in mother could cause hypoxia in fetus	Rare	None	TIV for all pregnant women during influenza season to decrease risk of hospitalization for cardiopulmonary complications in mother Droplet Precautions
Measles (rubeola)	Respiratory secretion coughing	Prematurity spontaneous abortion no congenital syndrome	Rare	Antibody test	Vaccine Airborne Precautions
N. meningitidis	Respiratory secretion of untreated patients or those who have received antimicrobials for <24 hours	Sepsis No congenital syndrome	Unknown	None	Chemoprophylaxis with ceftriaxone or azithromycin Vaccine if indicated for outbreak control Standard Precautions, especially mask, face protection for all intubations
Parvovirus B19	Respiratory secretion, blood, immunocompromised patients	Fetal hydrops, stillbirth, no congenital syndrome	Approximately 25 percent; fetal death <10 percent	No routine screening. B19 DNA can be detected in serum, leukocytes,	No vaccine. Defer care of immunocompromised patients with chronic anemia when possible Droplet Precautions

Agent	In-hospital Source	Potential Effect on the Fetus	Rate of Perinatal Transmission	Maternal Screening	Prevention
				respiratory secretions, urine, tissue specimens	
Rubella	Respiratory secretions	Congenital syndrome	90 percent in first trimester 40 to 50 percent overall	Routine rubella IgG testing in pregnancy Preconception screening recommended	Vaccine No congenital rubella syndrome described for vaccine Droplet Precautions; Contact Precautions; for points with congenital rubella
Smallpox (vaccinia)	Respiratory secretions, contents of pustular-vesicular lesions	Fetal vaccinia, premature delivery, spontaneous abortion, and perinatal death		History of successful vaccination within previous 5 years	Pre-event contraindicated during pregnancy. Vaccine and vaccinia immunoglobulin after exposure; pre-exposure; pre-exposure vaccine only if smallpox present in the community and exposure to patients with smallpox likely. Airborne infection isolation plus Contact Precautions.
Syphilis	Blood, lesion, fluid, amniotic fluid	Congenital syndrome	Variable 10 to 90 percent depends on stage of maternal disease and trimester of the infection	VDRL RPR FTA ABS	Postexposure prophylaxis with penicillin Standard Precautions gloves until 24 h of effective therapy completed for infants with congenital syphilis and all patients with skin and mucous membrane lesions
Tuberculosis	Sputum, skin lesions	Neonatal tuberculosis; liver most frequently infected	Rare	Tuberculin skin test or BAMT Chest radiograph	Varies with TST reaction size and chest radiograph result Airborne Precautions
Varicella zoster	Droplet or airborne spread of vesicle fluid or secretions of the respiratory tract (scabs are not infective)	Malformations (skin, limb, CNS, eye); chickenpox	Total 25 percent: congenital syndrome (0 to 4 percent)	Antibody	Vaccine; VZIG within 96 hours exposure if susceptible; Airborne and Contact Precautions

Agent	In-hospital Source	Potential Effect on the Fetus	Rate of Perinatal Transmission	Maternal Screening	Prevention

TIV, trivalent inactivated.

*Congenital syndrome: varying combinations of jaundice, hepatosplenomegaly, microcephaly, thrombocytopenia, anemia, retinopathy, and skin and bone lesions.

†Live virus vaccine given before or after pregnancy.