






# VACCINATION IN PREGNANCY



Vaccine	General Recommendation for Use in Pregnant Women	Notes
<b>Hepatitis A</b> <sup>1</sup>	Base decision on risk vs. benefit <sup>1</sup>	<ul style="list-style-type: none"> <li>Produced from inactivated HAV, thus the theoretic risk to the developing fetus is expected to be low.</li> <li>Pregnant women should be vaccinated with HepA vaccine if they are at risk for infection or severe outcome from infection during pregnancy.<sup>1</sup></li> </ul>
<b>Hepatitis B</b> <sup>1</sup> ★	Should be used only when clearly needed <sup>3</sup>	<ul style="list-style-type: none"> <li>An increased risk of adverse maternal or fetal events, including miscarriage or major birth defects, has not been observed following maternal use of the HepB vaccine.<sup>2</sup></li> <li>Heplisav-B and PreHevbrio are not recommended in pregnancy due to lack of safety data in pregnant women.<sup>1</sup></li> </ul>
<b>Human Papillomavirus (HPV)</b> <sup>1</sup>	Not recommended <sup>1</sup>	<ul style="list-style-type: none"> <li>The vaccine series (or completion of the series) should be delayed until pregnancy is completed.<sup>1</sup></li> </ul>
<b>Influenza (Inactivated or Recombinant)</b> <sup>1</sup> ★	Recommended <sup>1</sup>	<ul style="list-style-type: none"> <li>Can be administered at any time during pregnancy, before and during the influenza season.</li> <li>Pregnant and postpartum women are at higher risk for severe illness and complications from influenza.<sup>1</sup></li> </ul>
<b>Influenza Live attenuated influenza vaccine (LAIV)</b> <sup>1</sup>	Contraindicated <sup>1</sup>	<ul style="list-style-type: none"> <li>Due to theoretical risk of transmission of the vaccine virus to the fetus.<sup>4</sup></li> </ul>
<b>Measles, Mumps, Rubella (MMR)</b> <sup>1</sup>	Contraindicated <sup>1</sup>	<ul style="list-style-type: none"> <li>Due to theoretical risk of transmission to the fetus when the mother receives a live virus vaccine, women should be counseled to avoid becoming pregnant for 28 days after receipt of MMR vaccine.<sup>1</sup></li> </ul>
<b>Meningococcal (MenACWY)</b> <sup>1</sup>	May be used if indicated <sup>1</sup>	<ul style="list-style-type: none"> <li>Based on patient risk factors (e.g: medical, occupational, lifestyle, international travel) and should be given if susceptible regardless of pregnancy.<sup>4</sup></li> </ul>
<b>Meningococcal (MenB)</b> <sup>1</sup>	Base decision on risk vs. benefit <sup>1</sup>	<ul style="list-style-type: none"> <li>Vaccination should be deferred in pregnant women unless the patient is at increased risk for meningococcal disease and vaccination benefits outweigh the potential risks.<sup>1</sup></li> </ul>
<b>Diphtheria, Tetanus, and Pertussis (DTaP)</b> <sup>1</sup>	Recommended <sup>1</sup>	<ul style="list-style-type: none"> <li>Optimal timing for DTaP administration is between 27 and 36 weeks of gestation to maximize the maternal antibody response and passive antibody transfer to the infant although DTaP may be given at any time during pregnancy.</li> <li>For women not previously vaccinated with DTaP, if DTaP is not administered during pregnancy, DTaP should be administered immediately postpartum.<sup>1</sup></li> </ul>
<b>Tetanus Toxoid</b> <sup>10</sup> ★	Safe <sup>11</sup>	<ul style="list-style-type: none"> <li>Tetanus immunization can be administered safely during pregnancy even during first trimester.<sup>11</sup></li> </ul>
<b>COVID-19</b> <sup>1</sup>	Recommended <sup>1</sup>	<ul style="list-style-type: none"> <li>Benefits of vaccination outweigh any known or potential risks of COVID-19 vaccination during pregnancy.<sup>1</sup></li> </ul>

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<b>Pneumococcal Conjugate (PCV10, PCV13, PCV 15, PCV20)</b> <sup>1</sup>	May be used if indicated <sup>4</sup>	<input type="checkbox"/> Adverse fetal effects were not observed in animal developmental toxicity studies. <sup>6</sup> <input type="checkbox"/> Maternal administration of non-live bacterial vaccines has not been shown to cause increased risks to the fetus. <sup>7</sup>
<b>Pneumococcal Polysaccharide (PPSV23)</b>  E.g: Pneumovax 23 <sup>1</sup>	Should be used only when clearly needed <sup>5</sup>	<input type="checkbox"/> The safety during the first trimester of pregnancy has not been evaluated, although no adverse consequences have been reported among newborns whose mothers were inadvertently vaccinated during pregnancy. <sup>1</sup>
<b>Inactivated polio vaccine (IPV)</b> <sup>1</sup>	May be used if needed <sup>1</sup>	<input type="checkbox"/> Should be avoided. <input type="checkbox"/> However, if a pregnant woman is at increased risk for infection and requires immediate protection against polio, IPV can be administered in accordance with the recommended schedules for adults. <sup>1</sup>
<b>Varicella</b> <sup>1</sup>	Contraindicated <sup>1</sup>	<input type="checkbox"/> Effects of the varicella virus on the fetus are unknown. <input type="checkbox"/> Non-pregnant women who are vaccinated should avoid becoming pregnant for 1 month after each injection. <sup>1</sup>
<b>Recombinant Zoster Vaccine (RZV)</b> <sup>1</sup>	Consider delaying RZV until after pregnancy <sup>1</sup>	<input type="checkbox"/> Lack of data in pregnant women. <sup>1</sup>
<b>Bacillus Calmette Guerin (BCG)</b>  <sup>1</sup>	Contraindicated <sup>1</sup>	<input type="checkbox"/> Because of the theoretical risk to the fetus, women known to be pregnant generally should not receive live, attenuated virus vaccines. <sup>7</sup>
<b>Rabies</b> <sup>1</sup> 	May be used if indicated <sup>1</sup>	<input type="checkbox"/> Certain studies have indicated no increased incidence of abortion, premature births, or fetal abnormalities associated with rabies vaccination. <sup>1</sup>
<b>Typhoid</b> <sup>1</sup>	Inadequate data. Give Vi polysaccharide if needed <sup>1</sup>	<input type="checkbox"/> Animal reproduction studies have not been conducted. <input type="checkbox"/> The manufacturer of the Typhim Vi injection suggests delaying vaccination until the second or third trimester if possible. <sup>8</sup>
<b>Haemophilus Influenza B (Hib)</b> <sup>10</sup> 	Not routinely recommended. Can use Hib vaccine if they are at increased risk of Hib disease (eg women with asplenia) <sup>9</sup>	<input type="checkbox"/> Inactivated vaccines have not been shown to cause increased risks to the fetus. <sup>7</sup> <input type="checkbox"/> Limited data suggest that Hib vaccination during pregnancy is unlikely to harm the fetus. <sup>9</sup>

 Available in Hospital USM <sup>10</sup>

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