## Universal Measures to Prevent Infections during Pregnancy

### Respiratory or Flu Like Symptoms
- Avoid close intimate contact with adults with communicable diseases, acute or recent or flu like symptoms
  - Kissing
  - Sharing food utensils, drinking from the same container
- Wash hands frequently and if available use alcohol gel rub after shaking hands and before eating

### Sexual Contact
- Abstain from sex (oral, vaginal or anal) unless you are in a long-term, mutually monogamous relationship with an uninfected partner.
- Vaginal spermicides containing nonoxynol-9 (N-9) are not effective in preventing infectious diseases.
- Use male latex condom consistently and correctly.
  - Carefully handle the condom to avoid damaging.
  - Put the condom on after de penis is erect and before any genital, oral, or anal contact with your partner.
  - To prevent the condom from slipping off, hold the condom firmly against the base of the penis during withdrawal, and withdraw while the penis is still erect.
  - Do not use the condom more than once
- Avoid receptive oral sex with a partner with oral herpes or intercourse during the third trimester with men who have genital herpes.

### Blood Contact
- Consider the risk if you are thinking about getting a tattoo or body piercing.
- Do not shoot drugs
  - If you shoot drugs, stop and get into a treatment program;
  - If you can’t stop, never share needles, syringes, water, or “works”.
- • Use male latex condom consistently and correctly.
  - Carefully handle the condom to avoid damaging.
  - Put the condom on after the penis is erect and before any genital, oral, or anal contact with your partner.
  - To prevent the condom from slipping off, hold the condom firmly against the base of the penis during withdrawal, and withdraw while the penis is still erect.
  - Do not use the condom more than once

### Contact with Children
- Consider the risk if you are thinking about getting a tattoo or body piercing.
- • Abstain from sex (oral, vaginal or anal) unless you are in a long-term, mutually monogamous relationship with an uninfected partner.
- • Vaginal spermicides containing nonoxynol-9 (N-9) are not effective in preventing infectious diseases.
- • Use male latex condom consistently and correctly.
  - Carefully handle the condom to avoid damaging.
  - Put the condom on after the penis is erect and before any genital, oral, or anal contact with your partner.
  - To prevent the condom from slipping off, hold the condom firmly against the base of the penis during withdrawal, and withdraw while the penis is still erect.
  - Do not use the condom more than once
- • Avoid receptive oral sex with a partner with oral herpes or intercourse during the third trimester with men who have genital herpes.

### Environmental Risks
- Avoid consuming raw or undercooked lamb, pork, beef or poultry. Reheat until steaming: hot dogs, luncheon meats or deli meats.
- Check for hygienic warranties and freshness in refrigerated perishable and ready-to-eat food (e.g., cold meats, hot dogs, deli meat, pâté and salads).
- Do not eat unpasteurized dairy products (including all soft fresh cheeses),
- P able, meat spreads and smoked sea food may only be eaten if they are canned or shelf-stable.
- Peel or wash raw fruit and vegetables thoroughly to remove contaminated soil.
- Wash hands, knives, and cutting boards after handling uncooked foods or fluids from their packages.
- Wash hands thoroughly after handling raw meat
- Cook all meat (lamb, pork and beef ) until it is no longer pink and the juices run clear
- Avoid untreated (unfiltered) water.
- Wear gloves when gardening or working in soil.
- Avoid handling cat litter but if you must do it, use gloves and wash hands immediately after.
- If possible, keep cats indoors throughout pregnancy and do not feed cats uncooked meat.
- Cover children’s sandboxes when not in use (cats like to use them as litter boxes)
- Change cat litter daily

### Labor Related Risks
- Avoid working with children younger than 3 years of age.
- If you are a health care or public safety worker, always follow routine barrier precautions and safely handle blood, needles and other sharps.
<table>
<thead>
<tr>
<th>Pathogen (Disease)</th>
<th>Intrauterine</th>
<th>Perinatal</th>
<th>Postnatal</th>
<th>CLINICAL</th>
<th>LABORATORY</th>
<th>IMMUNIZATION</th>
<th>PREVENTION</th>
<th>TREATMENT</th>
<th>PREVENTION/ TREATMENT</th>
<th>CLINICAL</th>
<th>LABORATORY</th>
<th>IMMUNIZATION</th>
<th>PREVENTION</th>
<th>TREATMENT</th>
<th>POSTNATAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treponema pallidum (Syphilis)</td>
<td>++ (H)</td>
<td>—</td>
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<td>—</td>
<td>—</td>
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<tr>
<td>Human immunodeficiency virus (HIV)</td>
<td>±</td>
<td>++ (H)</td>
<td>+</td>
<td>Flu like</td>
<td>HIV Antibody</td>
<td>NO</td>
<td>Safe sex/condoms no IV drugs ZDV, Nevirapine, or other drugs regimens</td>
<td>Highly-active anti retroviral therapy (HAART)</td>
<td>Scheduled C/Secision if maternal viral load &gt;1000 near delivery, ZDV, Nevirapine, or other regimens</td>
<td>NO</td>
<td>Antibody follow up</td>
<td>Antigen. Nucleic acid testing for infant.</td>
<td>NOTE: Positive antibody test in infant indicates maternal infection</td>
<td>(not infant infection)</td>
<td>NO</td>
</tr>
<tr>
<td>Rubella virus</td>
<td>++</td>
<td>—</td>
<td>+</td>
<td>Rash Arthritis</td>
<td>IgG</td>
<td>MMR</td>
<td>Avoid contacts</td>
<td>NO</td>
<td>Post Partum MMR NO treatment</td>
<td>Congenital syndrome</td>
<td>IgM/ virus culture</td>
<td>NO</td>
<td>NO</td>
<td>Symptomatic treatment for s/s</td>
<td></td>
</tr>
<tr>
<td>Plasmodium falciparum (Malaria)</td>
<td>++</td>
<td>—</td>
<td>—</td>
<td>Fever in endemic areas</td>
<td>Microscopy in blood</td>
<td>NO</td>
<td>Insecticide treated bed nets</td>
<td>Quinine</td>
<td>NO</td>
<td>IUGR</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatitis B virus</td>
<td>±</td>
<td>++ (H)</td>
<td>/ f</td>
<td>NO</td>
<td>HBsAg</td>
<td>YES</td>
<td>Hepatitis B vaccination of persons at risk</td>
<td>NO</td>
<td>Hepatitis B vaccine for newborns within 12 hours of birth. In addition, where resources permit and maternal HBsAg testing occurs, administration of HBIG to infants.</td>
<td>NO</td>
<td>HBsAg and anti/HBs testing of infants born to HBsAg positive women</td>
<td>NO</td>
<td>HIgB + VACCINE</td>
<td>Vaccine</td>
<td>Interferon alfa-2b, peginterferon alfa-2b, lamivudine, adefovir, dipivoxil, entecavir, and telbivudine</td>
</tr>
<tr>
<td>Trypanosoma Cruzi (Chagas disease)</td>
<td>++</td>
<td>—</td>
<td>—</td>
<td>NO</td>
<td>IgG</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>Congenital syndrome</td>
<td>Microscopy by blood</td>
<td>NO</td>
<td>NO</td>
<td>Nilurtimox Bensevidizole</td>
<td></td>
</tr>
<tr>
<td>E. Coli (Asymptomatic bacteriuria)</td>
<td>++</td>
<td>—</td>
<td>—</td>
<td>NO</td>
<td>Urine culture</td>
<td>NO</td>
<td>NO</td>
<td>Antibiotics</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group B streptococci</td>
<td>/</td>
<td>/ (G,H)</td>
<td>+</td>
<td>Risk factors</td>
<td>Vaginal/ Rectal swab</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>Penicillin or Ampicillin IV &gt; 4 hs. before birth</td>
<td>Sepsis signs</td>
<td>PCR/CBC blood culture, lumbar puncture</td>
<td>NO</td>
<td>NO</td>
<td>Ampicillin</td>
<td></td>
</tr>
<tr>
<td>Varicella zoster virus (Chickenpox)</td>
<td>+</td>
<td>++ (H)</td>
<td>—</td>
<td>Typical rash</td>
<td>NO</td>
<td>YES</td>
<td>Avoid contacts/ IgG G if contact</td>
<td>Acyclovir if severe</td>
<td>Post partum vaccine NO treatment</td>
<td>Congenital syndrome</td>
<td>NO</td>
<td>Immuno- globulin if recent at birth</td>
<td>Isolate mother and neonate</td>
<td>Aiclovir</td>
<td></td>
</tr>
<tr>
<td>Herpes simplex virus I or II</td>
<td>±</td>
<td>++ (G,H)</td>
<td>—</td>
<td>Genital or oral typical lesions</td>
<td>NO</td>
<td>NO</td>
<td>Safe sex/condoms</td>
<td>Acyclovir if severe</td>
<td>Schedule C-section NO if active lesions</td>
<td>Neonatal Herpes</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>Aiclovir</td>
<td></td>
</tr>
<tr>
<td>Neisseria gonorrhoeae</td>
<td>+</td>
<td>++ (G)</td>
<td>—</td>
<td>Cervicitis Vaginal discharge</td>
<td>Culture</td>
<td>NO</td>
<td>Safe sex/condoms</td>
<td>Penicillin, Cilistime, Ceftriaxone</td>
<td>NO</td>
<td>Ophthalma/Pre term delivery</td>
<td>Culture</td>
<td>Cred-Tropical ATB</td>
<td>NO</td>
<td>Penicillin Ceftriazone</td>
<td></td>
</tr>
<tr>
<td>Chlamydia trachomatis</td>
<td>+</td>
<td>++ (G)</td>
<td>—</td>
<td>Cervicitis</td>
<td>NAAT</td>
<td>NO</td>
<td>Safe sex/condoms</td>
<td>Erythromycin Azithromycin</td>
<td>NO</td>
<td>Ophthalma/ Pneumonia</td>
<td>NAAT</td>
<td>Topical ATB</td>
<td>NO</td>
<td>Erythromycin Azithromycin</td>
<td></td>
</tr>
<tr>
<td>Toxoplasma gondii</td>
<td>++</td>
<td>—</td>
<td>—</td>
<td>Flu like</td>
<td>Ig G / IgG avidity</td>
<td>NO</td>
<td>Avoid cat litter Sal</td>
<td>Controversial but treatment usually given</td>
<td>NO</td>
<td>Congenital syndrome</td>
<td>IgG, IgM, IgA</td>
<td>NO</td>
<td>NO</td>
<td>Pyrimethamine + Sulfadiazine</td>
<td></td>
</tr>
<tr>
<td>Cytomegalovirus</td>
<td>++</td>
<td>++ (G,H)</td>
<td>+</td>
<td>Flu like</td>
<td>NO</td>
<td>NO</td>
<td>Avoid infant saliva and urine</td>
<td>Ampicillin</td>
<td>NO</td>
<td>Congenital syndrome</td>
<td>Antigen PCR</td>
<td>NO</td>
<td>NO</td>
<td>Controversial</td>
<td></td>
</tr>
<tr>
<td>Parvovirus</td>
<td>++</td>
<td>—</td>
<td>—</td>
<td>Flu like, arthritis</td>
<td>NO</td>
<td>NO</td>
<td>No Tansfusion</td>
<td>Fetal transfusion</td>
<td>Antigen PCR</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>Blood transfusion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatitis C virus</td>
<td>±</td>
<td>++ (H)</td>
<td>—</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>No IV drugs</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Listeria monocytogenes</td>
<td>++</td>
<td>++ (G,H)</td>
<td>—</td>
<td>Diarrhea, fever</td>
<td>NO</td>
<td>NO</td>
<td>Avoid cold cuts/ soft Cheeses</td>
<td>Penicillin</td>
<td>NO</td>
<td>Sepsis</td>
<td>Culture</td>
<td>NO</td>
<td>NO</td>
<td>Penicillin</td>
<td></td>
</tr>
</tbody>
</table>

+++ = main route of transmission. + = recognized, but less common, route. ± = uncommon or possible, but uncertain, route (G) = genital. (H) = haematogenou