UTAH PREVENTIVE CARE RECOMMENDATIONS
Adult - Ages 19 and Above

IMMUNIZATIONS

CONTENTS:

GENERAL INSTRUCTIONS

Link to CDC's adult immunization schedule.

HEPATITIS A

Immunize those at HIGH RISK

Use immunization for pre-exposure prophylaxis. Use immunization for post-exposure prophylaxis through 40 years of age if incompletely vaccinated (less than 2 doses). Use immunoglobulin (IG) for post-exposure prophylaxis for ages older than 40 years, and if incompletely vaccinated, immunize as well.

Series of 2 doses, 6-12 months apart. One dose is 720 Elu/0.5ml (GSK) or 25 u/0.5 ml (Merck)

Combination vaccine of Hepatitis A and Hepatitis B requires 3 doses, with dose 2 given one month after dose 1 and dose 3 given 6 months after dose 1

HIGH RISK includes:

- Persons living, traveling to or working in areas where disease is endemic (i.e. developing countries, Alaska native, Pacific Islander, Native American communities and certain religious groups)
- Persons living or working anywhere EXCEPT the United States, Western Europe, New Zealand, Australia, Canada and Japan
- Residents and staff of institutional settings
- Men who have sex with men
- Homeless persons

- Illegal drug users (injection and non-injection)
- Persons with occupational risk (work with HAV infected primates or with HAV in a laboratory setting)
- Military personnel
- Employees of child care centers
- Persons who have clotting factor disorders
- Persons who have chronic liver disease

HEPATITIS B

Immunize all adults seeking protection from Hepatitis B infection, including unvaccinated adults at HIGH RISK for Hepatitis B

For Engerix-B® and Recombivax®: Series of 3 doses. Dose 2 given at least 4 weeks after dose 1, and Dose 3 usually given 6 months after first dose (but must be given at least 16 weeks after first dose and 8 weeks after second dose).

For HEPLISAV-B®: Series of 2 doses. Dose 2 given at least 4 weeks after dose 1.

HIGH RISK includes:

- Adults ages 19-59 with diabetes
- Health Care workers, public safety workers, and others at occupational risk (e.g., workers at STD treatment facilities, HIV testing and treatment facilities, drug abuse treatment facilities, hemodialysis and end stage renal facilities, correctional facilities)
- Clients and staff of institutions for the developmentally disabled – including non-residential day care programs if attended by known HBV carriers
- Hemophiliacs and other recipients of certain blood products
- Hemodialysis patients
- Household contacts and sex partners of HBs-Ag positive persons
- Household contacts of adoptees from HBV-endemic countries who are HBs-Ag positive
- International travelers who spend more than 6 months in an area with high HBV infection rates and have close contact with the local population; also short-term travelers who have contact with blood, or sexual contact with residents in high- or intermediate-risk areas
- Injection drug users
- Men who have sex with men
- People with HIV
- Individuals who have had more than one sex partner in the previous 6 months and/or those with a recent episode of a sexually transmitted infection
- People with chronic liver conditions, including Hepatitis C infection, cirrhosis, fatty liver disease, alcoholic liver disease, autoimmune hepatitis, and liver function tests greater than two times the upper limit of normal
- Inmates of long-term correctional institutions

HUMAN PAPILLOMA VIRUS (HPV)

Immunize all women up to age 26 years with quadrivalent vaccine who have not been previously vaccinated. If the woman is pregnant, defer any remaining doses until after completion of pregnancy.

Immunize all men up to age 21 years with quadrivalent vaccine who have not been previously vaccinated. Immunize all immunocompromised men and men having sex with men (MSM) ages 22-26 years.

If the first dose of the series is initiated in a healthy individual from age 9 through 14 years, it consists of 2 doses, with the second dose given 6-12 months after the first dose. The minimum valid dosing interval is 5 months.

Series of 3 doses for individuals who start the series age 15 years or older, or who are immunocompromised. Dose 2 given 2 months after Dose 1 and Dose 3 given 6 months after Dose 1.

Individuals who are sexually active, who have previously been diagnosed with Human Papilloma Virus (HPV) or who are currently infected, who have a previous diagnosis of carcinoma in situ (CIN), who are immunosuppressed, or women who are lactating should still receive HPV immunization.

Regular cervical cancer screening should still be performed in women who have received HPV immunization. The HPV vaccine is not effective at treating current HPV infections.

INFLUENZA

Yearly influenza immunization is recommended universally to all adults. One dose of influenza vaccine to be administered ideally prior to the start of the influenza season. Continue to vaccinate throughout the whole influenza season.

High-dose influenza vaccine should be provided to seniors age 65 years and above.

Seasonal influenza vaccine resources for providers can be found at the CDC's Influenza Program website

MMR

Evidence of immunity is considered to be:

1) Birth before 1957
2) Laboratory evidence of immunity to measles, mumps and rubella
3) Documentation of physician diagnosis of measles, mumps and rubella

All adults who lack evidence of immunity should have documentation of one dose of MMR vaccine

Adults at HIGH RISK who lack evidence of immunity should have documentation of two doses of MMR given at least one month apart.

HIGH RISK includes:

- Persons who work in health-care facilities
- International travelers
- Students at post-high school educational institutions

Health care workers born prior to 1957 without other evidence of immunity should receive one dose of MMR (2 doses during an outbreak)

Women of child bearing age should be immunized prior to becoming pregnant and should wait to become pregnant for at least 4 weeks after the receipt of last dose of MMR vaccine.

Women of child bearing age who have received 1 or 2 doses of rubella-containing vaccine and have rubella serum IgG levels that are not clearly positive should be administered 1 additional dose of MMR vaccine (maximum of 3 doses) and do not need to be retested for serologic evidence of rubella immunity. This is the only situation where a third dose of MMR vaccine is recommended.

MENINGOCOCCAL A, C, Y, W (MCV4)

Consider vaccination of adults considered to be at risk:

- Anticipated college enrollees ages 19 through 21 years who lack documentation of receipt of MCV4 at age 16 years or older
- Adults with terminal complement component deficiencies
- Anatomic or functional asplenia
- Microbiologists
- Military recruits
- HIV positive

Other indications: Travelers to countries in which disease is hyperendemic to epidemic ("meningitis belt" of sub-Saharan Africa, Mecca, Saudi Arabia for Hajj).

Although MCV4 is approved up to age 55 years, it may be given off-label to adults age ≥55 years as recommended by the ACIP.

For adults at continued risk, revaccinate with one dose every 5 years.

MENINGOCOCCAL B

Indicated for High risk adults who:

- Have persistent complement component deficiency
- Are treated with eculizumab
- Have functional or anatomic asplenia
- Are microbiologists exposed to *N. meningitides*
- Are in an outbreak situation

Men B vaccine for high risk adults or during an outbreak should be provided as a 3-dose series for Trumenba (0, 1-2 mo, 6 mo) and a 2-dose series for Bexero (0, 1mo).

Through age 23 years, Meningococcal B may be provided for short-term protection (ACIP category B recommendation) but is not considered a routinely recommended vaccine by the ACIP. When given for short-term protection it may be provided in a 2-dose series for Trumenba (0, 6mo) and for Bexero (0, 1mo).If the second dose of Trumenba is given earlier than 6 months after the first dose, a third dose should be given at least 4 months after the second dose.

PNEUMOCOCCAL CONJUGATE VACCINE (PCV13)

All individuals age 65 and above who have never received a pneumococcal conjugate vaccine should receive one dose of PCV13, preferably prior to receiving PPSV23. If the individual has received a previous dose of PPSV23, wait one year after the PPSV23 dose to administer the PCV13.

Note: CMS currently only pays for two pneumococcal vaccines after age 65. One dose of each PCV13 and PPSV23 should be provided to seniors.

Adults ages 19 through 64 years who are immunocompromised, or who have functional anatomic asplenia, cochlear implant or CSF leak should receive one dose of PCV13. If the individual has never received a dose of PPSV23 vaccine, administer one dose of PPSV23 at least 8 weeks after a dose of PCV13. If the individual has received a dose of PPSV23 vaccine, administer one dose of PCV13 at least 1 year after PPSV23. Then, if the individual is indicated for another dose of PPSV23, administer it at least 5 years after the first PPSV23 dose and at least 8 weeks after PCV13 dose.

PNEUMOCOCCAL POLYSACCHARIDE VACCINE (PPSV23)

PPSV23 (Pneumovax 23) is a standard one-dose vaccination for adults age 65 years and above, to be given at least 12 months after a single dose of the pneumococcal conjugate vaccine, PCV13 (Prevnar 13). If the individual has previously received a dose of PPSV23 prior to age 65, they should wait at least 5 years to receive the dose after 65 years of age.

Note: CMS currently only pays for two pneumococcal vaccines after age 65. One dose of each PCV13 and PPSV23 should be provided to seniors.

For HIGH RISK adults ages 19 to 64 years:
Give one dose of PPSV23, preferably at least 8 weeks after one dose of PCV13 for those high risk who have an indication for PCV13.

HIGH RISK includes:

- Immunocompromised individuals such as those with HIV, leukemia, lymphoma, Hodgkin's disease, multiple myeloma, malignancy, chronic renal failure, nephrotic syndrome, or organ transplantation
- Persons immunosuppressed from chemotherapy or high dose corticosteroid therapy (>14 days)
- Persons who have functional or anatomic asplenia
- Persons with cochlear implants
- Persons with chronic illness such as cardiovascular disease, pulmonary disease (including asthma), diabetes mellitus, alcoholism, chronic liver disease, or CSF leaks
- Residents of long-term care facilities
- Residents of special environments or social settings with and increased risk of pneumococcal disease or its complications such as Alaskan Natives and certain American Indian populations
- Smokers

Revaccination prior to age 65 is recommended once for those who are immunocompromised or immunosuppressed, have an organ transplant, or asplenia. Spacing between PPSV23 doses should be 5 years or greater.

Td/Tdap BOOSTER

One does of Tdap should be provided to all adults ages 19 and above. Then resume Td booster, one dose every 10 years.

There is no need for a timing separation between a dose of Tdap and a previous dose of tetanus containing vaccine.

Pregnant mothers should receive one does of Tdap during each pregnancy, ideally in gestational weeks 27 to 36 in order to protect their infant with both transplacental passive immunity and reduced risk of exposure to an infected mother. Adults who will have close contact with infants should have received a Tdap vaccine at least 2 weeks prior to contact with the infant.

VARICELLA

Immunize adults who have previously received one dose with a second dose catch-up vaccine, unless they have evidence of immunity. Unimmunized, healthy adults should receive two doses 4 to 8 weeks apart, unless they have evidence of immunity.

Criteria for evidence of immunity to varicella include any of the following:

1. Born in the US before 1980 (except in the case of healthcare providers and pregnant women)
2. Documentation of two doses of varicella vaccine
3. Laboratory evidence of immunity or laboratory confirmation of disease
4. A healthcare provider diagnosis of varicella or healthcare provider verification of history of varicella disease
5. History of herpes zoster based on healthcare provider diagnosis

Women should be assessed prenatally for immunity. Women should not be immunized during pregnancy. If they lack immunity, they should receive their first immunization prior to discharge from the healthcare facility post-partum, with a second dose given 4-8 weeks later.

ZOSTER (SHINGLES)

One doses of Shingrix® at least 4 weeks apart to individuals age 50 years and older for the prevention of herpes zoster (shingles).

Persons who have previously been vaccinated with one dose of Zostavax® should receive 2 doses of Shingrix®.

Persons not fully vaccinated with 2 doses of Shingrix® who have a case of herpes zoster shingles should be vaccinated with Shingrix® series after shingles lesions have resolved.

Should not be given to individuals who are or may become pregnant within one month of immunization.