Immunization & Preventive Cancer Screening Guidelines

As part of the 2018 Get Wellthy wellness program MMIA is incentivizing eligible employees, spouses, and retirees for completing an immunization or an age and gender appropriate cancer screening.

Cancer Screenings
Our data shows that participants of the MMIA self-funded pool are lacking appropriate cancer screenings such as mammograms and colonoscopies. Detecting cancer early saves lives and reduces claims to the MMIA pool. Any of the cancer screenings listed on pages 8-9 of this packet count for the incentive, but may not be paid at 100% by the plan. See, “Cost” below.

Please be aware not everyone needs a cancer screening every year. Our incentives are based on current medical recommendations from the US Preventive Services Task Force (USPSTF). In particular, please note the USPSTF does not recommend the PSA test so it is not an eligible screening for this incentive. Talk to your provider about whether any cancer screenings are currently appropriate for you.

Immunizations
Because not everyone needs a cancer screening every year, we wanted to incentivize another healthy, preventive activity. Getting an immunization like a flu shot or a TDAP is a great way to keep you and those around you healthier. Not all shots count, so please refer to the comprehensive list of eligible immunizations, as recommended by the Center for Disease Control, in this packet and consult with your provider to see which is right for you.

Cost
Not all immunizations and eligible cancer screenings are considered preventive. USPSTF-recommended cancer screenings with grades A, B, or C will be covered at 100% by your medical plan once per plan year. If your screening is listed on p. 8-9 in the USPSTF guidelines but has a grade of “D” or “I”, it will not be covered at 100%, but will still be eligible for the incentive. See your Summary Plan Document at www.mmia.net/employee-benefits for more details.

Tracking This Incentive Activity
Your cancer screening and/or immunization must be sent as a claim to Allegiance or ProAct in order to be eligible for this incentive. Eligible claims will be automatically reported to the secure and confidential online Engage portal (https://portal.healthspective.com/mmia).

It can take up to two months for data to appear in the portal. If your incentive for this activity still hasn’t loaded after two months, call DHS Group who manages the HealthSpective Engage portal at 1-832-201-8500 option 2 and leave a message. A team member will get back to you shortly.
Recommended Immunization Schedule for Adults Aged 19 Years or Older, United States, 2018

In February 2018, the Recommended Immunization Schedule for Adults Aged 19 Years or Older, United States, 2018 became effective, as recommended by the Advisory Committee on Immunization Practices (ACIP) and approved by the Centers for Disease Control and Prevention (CDC). The adult immunization schedule was also approved by the American College of Physicians, the American Academy of Family Physicians, the American College of Obstetricians and Gynecologists, and the American College of Nurse-Midwives.

CDC announced the availability of the 2018 adult immunization schedule in the Morbidity and Mortality Weekly Report (MMWR). The schedule is published in its entirety in the Annals of Internal Medicine.

The adult immunization schedule consists of figures that summarize routinely recommended vaccines for adults by age groups and medical conditions and other indications, footnotes for the figures, and a table of vaccine contraindications and precautions. Note the following when reviewing the adult immunization schedule:

- The figures in the adult immunization schedule should be reviewed with the accompanying footnotes.
- The figures and footnotes display indications for which vaccines, if not previously administered, should be administered unless noted otherwise.
- The table of contraindications and precautions identifies populations and situations for which vaccines should not be used or should be used with caution.
- When indicated, administer recommended vaccines to adults whose vaccination history is incomplete or unknown.
- Increased interval between doses of a multidose vaccine series does not diminish vaccine effectiveness; it is not necessary to restart the vaccine series or add doses to the series because of an extended interval between doses.
- Combination vaccines may be used when any component of the combination is indicated and when the other components of the combination are not contraindicated.
- The use of trade names in the adult immunization schedule is for identification purposes only and does not imply endorsement by the ACIP or CDC.

Special populations that need additional considerations include:

- Pregnant women. Pregnant women should receive the tetanus, diphtheria, and acellular pertussis vaccine (Tdap) during pregnancy and the influenza vaccine during or before pregnancy. Live vaccines (e.g., varicella, mumps, and rubella vaccine [MMR]) are contraindicated.
- Asplenia. Adults with asplenia have specific vaccination recommendations because of their increased risk for infection by encapsulated bacteria. Anatomical or functional asplenia includes congenital or acquired asplenia, splenic dysfunction, sickle cell disease and other hemoglobinopathies, and splenectomy.
- Immunocompromising conditions. Adults with immunosuppression should generally avoid live vaccines. Inactivated vaccines (e.g., pneumococcal vaccines) are generally acceptable. High-level immunosuppression includes HIV infection with a CD4 cell count <200 cells/μL, receipt of daily corticosteroid therapy with ≥20 mg of prednisone or equivalent for ≥14 days, primary immunodeficiency disorder (e.g., severe combined immunodeficiency or complement component deficiency), and receipt of cancer chemotherapy. Other immunocompromising conditions and immunosuppressive medications to consider when vaccinating adults can be found in IDSA Clinical Practice Guideline for Vaccination of the Immunocompromised Host. Additional information on vaccinating immunocompromised adults is in General Best Practice Guidelines for Immunization.

Additional resources for health care providers include:

- Details on vaccines recommended for adults and complete ACIP statements at www.cdc.gov/vaccines/hcp/acip-recs/index.html
- Vaccine Information Statements that explain benefits and risks of vaccines at www.cdc.gov/vaccines/hcp/vis/index.html
- Information and resources on vaccinating pregnant women at www.cdc.gov/vaccines/adults/rec-vac/pregnant.html
- Information on travel vaccine requirements and recommendations at www.cdc.gov/travel/destinations/list
- CDC Vaccine Schedules App for immunization service providers to download at www.cdc.gov/vaccines/schedules/hcp/schedule-app.html
- Adult Vaccination Quiz for self-assessment of vaccination needs based on age, health conditions, and other indications at www2.cdc.gov/nip/adultimmunsched/default.asp
- Recommended Immunization Schedule for Children and Adolescents Aged 18 Years or Younger at www.cdc.gov/vaccines/schedules/hcp/child-adolescent.html

Report suspected cases of reportable vaccine-preventable diseases to the local or state health department, and report all clinically significant postvaccination events to the Vaccine Adverse Event Reporting System at www.vaers.hhs.gov or by telephone, 800-822-7967. All vaccines included in the adult immunization schedule except 23-valent pneumococcal polysaccharide and zoster vaccines are covered by the Vaccine Injury Compensation Program. Information on how to file a vaccine injury claim is available at www.hrsa.gov/vaccinecompensation or by telephone, 800-338-2382. Submit questions and comments to CDC through www.cdc.gov/cdc-info or by telephone, 800-CDC-INFO (800-232-4636), in English and Spanish, 8:00am–8:00pm ET, Monday–Friday, excluding holidays.

The following abbreviations are used for vaccines in the adult immunization schedule (in the order of their appearance):

- IIV inactivated influenza vaccine
- RIV recombinant influenza vaccine
- Tdap tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine
- Td tetanus and diphtheria toxoids
- MMR measles, mumps, and rubella vaccine
- varicella vaccine
- recombinant zoster vaccine
- zoster vaccine live
- human papillomavirus vaccine
- 13-valent pneumococcal conjugate vaccine
- 23-valent pneumococcal polysaccharide vaccine
- hepatitis A vaccine
- hepatitis A vaccine and hepatitis B vaccine
- hepatitis B vaccine
- serogroups A, C, W, and Y meningococcal vaccine
- serogroup B meningococcal vaccine
- type b vaccine

4. ACIP. Available at www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html.
Figure 1. Recommended immunization schedule for adults aged 19 years or older by age group, United States, 2018

This figure should be reviewed with the accompanying footnotes. This figure and the footnotes describe indications for which vaccines, if not previously administered, should be administered unless noted otherwise.

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>19–21 years</th>
<th>22–26 years</th>
<th>27–49 years</th>
<th>50–64 years</th>
<th>≥65 years</th>
</tr>
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<tbody>
<tr>
<td>Flu</td>
<td>1 dose annually</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Tdap² or Td²</td>
<td>1 dose Tdap, then Td booster every 10 yrs</td>
<td></td>
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<tr>
<td>MMR³</td>
<td>1 or 2 doses depending on indication (if born in 1957 or later)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>VAR⁴</td>
<td>2 doses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RZV⁵ (preferred)</td>
<td>2 doses RZV (preferred)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ZVL⁵</td>
<td>1 dose ZVL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HPV–Female⁶</td>
<td>2 or 3 doses depending on age at series initiation</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>HPV–Male⁶</td>
<td>2 or 3 doses depending on age at series initiation</td>
<td></td>
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<tr>
<td>PCV13⁷</td>
<td>1 dose</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>PPSV23⁷</td>
<td>1 or 2 doses depending on indication</td>
<td>1 dose</td>
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<tr>
<td>HepA⁸</td>
<td>2 or 3 doses depending on vaccine</td>
<td></td>
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<tr>
<td>HepB⁹</td>
<td>3 doses</td>
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<tr>
<td>MenACWY¹⁰</td>
<td>1 or 2 doses depending on indication, then booster every 5 yrs if risk remains</td>
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<td></td>
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<tr>
<td>MenB¹⁰</td>
<td>2 or 3 doses depending on vaccine</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hib¹¹</td>
<td>1 or 3 doses depending on indication</td>
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</tbody>
</table>

- Recommended for adults who meet the age requirement, lack documentation of vaccination, or lack evidence of past infection
- Recommended for adults with other indications
- No recommendation

1 dose annually: 1 dose of vaccine annually
2 doses: 2 doses
1 dose ZVL: 1 dose of ZVL
2 doses RZV (preferred): 2 doses of RZV (preferred)
2 or 3 doses depending on indication: 2 or 3 doses depending on indication
2 or 3 doses depending on age at series initiation: 2 or 3 doses depending on age at series initiation
2 or 3 doses depending on vaccine: 2 or 3 doses depending on vaccine
1 or 2 doses depending on indication: 1 or 2 doses depending on indication
1 or 3 doses depending on indication: 1 or 3 doses depending on indication
1 or 2 doses depending on indication, then booster every 5 yrs if risk remains: 1 or 2 doses depending on indication, then booster every 5 yrs if risk remains
1 dose Tdap, then Td booster every 10 yrs: 1 dose Tdap, then Td booster every 10 yrs
1 or 2 doses depending on indication (if born in 1957 or later): 1 or 2 doses depending on indication (if born in 1957 or later)
1 dose RZV (preferred): 1 dose RZV (preferred)
3 doses: 3 doses
This figure should be reviewed with the accompanying footnotes. This figure and the footnotes describe indications for which vaccines, if not previously administered, should be administered unless noted otherwise.

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<tbody>
<tr>
<td>Influenza[^1]</td>
<td>1 dose annually</td>
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<td></td>
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<tr>
<td>Tdap[^2] or Td[^2]</td>
<td>1 dose Tdap each pregnancy</td>
<td></td>
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<td></td>
<td>1 dose Tdap, then Td booster every 10 yrs</td>
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<tr>
<td>MMR[^3]</td>
<td>contraindicated</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>1 or 2 doses depending on indication</td>
</tr>
<tr>
<td>VAR[^4]</td>
<td>contraindicated</td>
<td></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>2 doses</td>
</tr>
<tr>
<td>RZV[^5] (preferred) or ZVL[^5]</td>
<td>contraindicated</td>
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<td></td>
<td></td>
<td></td>
<td>2 doses RZV at age ≥50 yrs (preferred)</td>
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<tr>
<td>HPV–Female[^6]</td>
<td>3 doses through age 26 yrs</td>
<td></td>
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<td>2 or 3 doses through age 26 yrs</td>
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<tr>
<td>HPV–Male[^6]</td>
<td>3 doses through age 26 yrs</td>
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<td></td>
<td></td>
<td>2 or 3 doses through age 21 yrs</td>
<td>2 or 3 doses through age 26 yrs</td>
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<tr>
<td>PCV13[^7]</td>
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<td></td>
<td></td>
<td></td>
<td>1 dose</td>
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<tr>
<td>PPSV23[^7]</td>
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<td>1, 2, or 3 doses depending on indication</td>
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<tr>
<td>HepA[^8]</td>
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<td></td>
<td></td>
<td>2 or 3 doses depending on vaccine</td>
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<tr>
<td>HepB[^9]</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3 doses</td>
</tr>
<tr>
<td>MenACWY[^10]</td>
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<td></td>
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<td></td>
<td></td>
<td>1 or 2 doses depending on indication, then booster every 5 yrs if risk remains</td>
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<tr>
<td>MenB[^10]</td>
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<td></td>
<td></td>
<td>2 or 3 doses depending on vaccine</td>
</tr>
<tr>
<td>Hib[^11]</td>
<td></td>
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<td></td>
<td>3 doses HSCT recipients only</td>
</tr>
</tbody>
</table>

[^1]: Recommended for adults who meet the age requirement, lack documentation of vaccination, or lack evidence of past infection
[^2]: Recommended for adults with other indications
[^3]: Contraindicated
[^4]: No recommendation

1. Measles, mumps, and rubella vaccination
   - Administer 1 dose of measles, mumps, and rubella vaccine (MMR) to adults with no evidence of immunity to measles, mumps, or rubella;
     - Evidence of immunity is:
       - Born before 1957 (except for health care personnel, see below)
       - Documentation of receipt of MMR
       - Laboratory evidence of immunity or disease
   Special populations
   - Pregnant women: Administer 1 dose of MMR after pregnancy and before discharge from health care facility

2. Tetanus, diphtheria, and pertussis vaccination
   - Administer 1 dose of tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine (Tdap) as an adult or child (routinely recommended at age 11–12 years) 1 dose of Tdап, followed by a dose of tetanus and diphtheria toxoids (Td) booster every 10 years
   - Information on the use of Tdap or Td as tetanus prophylaxis in wound management is available at www.cdc.gov/mmwr/preview/mmwrhtml/rr5517a1.htm

3. Measles, mumps, and rubella vaccination
   - Administer 1 dose of MMR to adults with no evidence of immunity to measles, mumps, or rubella
   - Evidence of immunity is:
     - Born before 1957 (except for health care personnel, see below)
     - Documentation of receipt of MMR
     - Laboratory evidence of immunity or disease
   Special populations
   - Pregnant women: Administer 1 dose of MMR after pregnancy and before discharge from health care facility

4. Varicella vaccination
   - Administer 2 doses of varicella vaccine (VAR) 4–8 weeks apart if previously received no varicella-containing vaccine (if previously received 1 dose of varicella-containing vaccine, administer 1 dose of MMR after varicella (VAR) at least 4 weeks after the first dose) to:
     - Pregnant women without evidence of immunity
     - Health care personnel without evidence of immunity
     - Adults with HIV infection and CD4 cell count ≥200 cells/μL
   Special populations
   - Pregnant women and nonpregnant women of childbearing age with no evidence of immunity to rubella: Administer 1 dose of MMR after pregnancy and before discharge from health care facility

5. Zoster vaccination
   - Administer 2 doses of recombiant zoster vaccine (RZV) 2–6 months apart to adults aged 50 years or older regardless of past episode of herpes zoster or receipt of zoster vaccine live (ZVL)

6. Human papillomavirus vaccination
   - Administer human papillomavirus (HPV) vaccine to females through age 26 years and males through age 21 years
   - Pregnant women: Follow the same schedule of doses as nonpregnant females through age 26 years
   - Men who have sex with men through age 26 years: Administer 3-dose series at 0, 1–2, and 6 months
   - Adults with immunocompromising conditions (including HIV infection) through age 26 years: Administer 3-dose series at 0, 1–2, and 6 months
   - Adults who previously received ≥2 doses of HPV vaccine:
     - No previous dose of HPV vaccine: Administer 3-dose series at 0, 1–2, and 6 months
     - Aged 9–14 years at HPV vaccine series initiation and received 1 dose or 2 doses less than 5 months apart: Administer 1 dose
     - Aged 9–14 years at HPV vaccine series initiation and received 2 doses at least 5 months apart: No additional dose is needed

7. Pneumococcal vaccination
   - Administer to immunocompetent adults aged 65 years or older 1 dose of 13-valent pneumococcal conjugate vaccine (PCV13), if not previously administered, followed by 1 dose of 23-valent pneumococcal polysaccharide vaccine (PPSV23) at least 1 year after PCV13; if PPSV23 was previously administered but not PCV13, administer PCV13 at least 1 year after PPSV23
   - When both PCV13 and PPSV23 are indicated, administer PCV13 first (PCV13 and PPSV23 should not be administered during the same visit); additional information on vaccine timing is available at www.cdc.gov/vaccines/vpd/pneumo/downloads/pneumo-vaccine-timing.pdf

Footnotes. Recommended immunization schedule for adults aged 19 years or older, United States, 2018

- HIV infection and CD4 cell count ≥200 cells/μL for at least 6 months and no evidence of immunity to measles, mumps, or rubella: Administer 2 doses of MMR at least 28 days apart
- Students in postsecondary educational institutions, international travelers, and household contacts of immunocompromised persons: Administer 2 doses of MMR at least 28 days apart (or 1 dose of MMR if previously administered 1 dose of MMR)
- Health care personnel born in 1957 or later with no evidence of immunity: Administer 2 doses of MMR at least 28 days apart for measles or mumps, or 1 dose of MMR for rubella (if born before 1957, consider MMR vaccination)
- Adults who previously received ≤2 doses of mumps-containing vaccine and are identified by public health authority to be at increased risk for mumps in an outbreak: Administer 1 dose of MMR
- MMR is contraindicated for pregnant women and adults with severe immunodeficiency
- ZVL is contraindicated for pregnant women and adults with severe immunodeficiency

General information
- Administer human papillomavirus (HPV) vaccine to females through age 26 years and males through age 21 years
- Pregnant women:
  - Follow the same schedule of doses as nonpregnant females through age 26 years
  - Men who have sex with men through age 26 years:
    - Administer 2- or 3-dose series depending on age at initial vaccination (see above); if no history of HPV vaccine, administer 3-dose series at 0, 1–2, and 6 months
- Adults with immunocompromising conditions (including HIV infection) through age 26 years: Administer 3-dose series at 0, 1–2, and 6 months
- Adults who previously received ≥2 doses of HPV vaccine:
  - No previous dose of HPV vaccine: Administer 3-dose series at 0, 1–2, and 6 months
  - Aged 9–14 years at HPV vaccine series initiation and received 1 dose or 2 doses less than 5 months apart: Administer 1 dose
  - Aged 9–14 years at HPV vaccine series initiation and received 2 doses at least 5 months apart: No additional dose is needed
- Special populations
  - Adults with immunocompromising conditions (including HIV infection) through age 26 years: Administer 3-dose series at 0, 1–2, and 6 months
  - Pregnant women:HPV vaccination is not recommended during pregnancy, but there is no evidence that the vaccine is harmful and no intervention needed for women who inadvertently receive HPV vaccine while pregnant; delay remaining doses until after pregnancy; pregnancy testing is not needed before vaccination

General information
- Administer to immunocompetent adults aged 65 years or older 1 dose of 13-valent pneumococcal conjugate vaccine (PCV13), if not previously administered, followed by 1 dose of 23-valent pneumococcal polysaccharide vaccine (PPSV23) at least 1 year after PCV13; if PPSV23 was previously administered but not PCV13, administer PCV13 at least 1 year after PPSV23
- When both PCV13 and PPSV23 are indicated, administer PCV13 first (PCV13 and PPSV23 should not be administered during the same visit); additional information on vaccine timing is available at www.cdc.gov/vaccines/vpd/pneumo/downloads/pneumo-vaccine-timing.pdf

Information on the use of Tdap or Td as tetanus prophylaxis in wound management is available at www.cdc.gov/mmwr/preview/mmwrhtml/rr5517a1.htm
Special populations
- Administer to adults aged 19 through 64 years with the following chronic conditions 1 dose of PPSV23 (at age 65 years or older, administer 1 dose of PCV13, if not previously received, and another dose of PPSV23 at least 1 year after PCV13 and at least 5 years after PPSV23):
  - Chronic heart disease (excluding hypertension)
  - Chronic lung disease
  - Chronic liver disease
  - Alcoholism
  - Diabetes mellitus
  - Cigarette smoking

- Administer to adults aged 19 years or older with the following indications 1 dose of PCV13 followed by 1 dose of PPSV23 at least 8 weeks after PCV13, and a second dose of PPSV23 at least 5 years after the first dose of PPSV23 (if the most recent dose of PPSV23 was administered before age 65 years, at age 65 years or older, administer another dose of PPSV23 at least 5 years after the last dose of PPSV23):
  - Immunodeficiency disorders (including B- and T-lymphocyte deficiency, complement deficiencies, and phagocytic disorders)
  - HIV infection
  - Anatomical or functional asplenia (including sickle cell disease and other hemoglobinopathies)
  - Chronic renal failure and nephrotic syndrome

- Administer to adults aged 19 years or older with the following indications 1 dose of PCV13 followed by 1 dose of PPSV23 at least 8 weeks after PCV13 (if the dose of PPSV23 was administered before age 65 years, at age 65 years or older, administer another dose of PPSV23 at least 5 years after the last dose of PPSV23):
  - Cerebrospinal fluid leak
  - Cochlear implant

8. Hepatitis A vaccination
www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/hepa.html

General information
- Administer to adults who have a specific risk (see below), or lack a risk factor but want protection, 3-dose series of single antigen hepatitis B vaccine (HepB) or combined hepatitis A and hepatitis B vaccine (HepA-HepB) at 0, 1, and 6 months (minimum intervals: 4 weeks between doses 1 and 2 for HepB and HepA-HepB; between doses 2 and 3, 8 weeks for HepB and 5 months for HepA-HepB)

Special populations
- Administer HepB or HepA-HepB to adults with the following indications:
  - Chronic liver disease (e.g., hepatitis C infection, cirrhosis, fatty liver disease, alcoholic liver disease, autoimmune hepatitis, alanine aminotransferase [ALT] or aspartate aminotransferase [AST] level greater than twice the upper limit of normal)
  - HIV infection
  - Percutaneous or mucosal risk of exposure to blood (e.g., household contacts of hepatitis B surface antigen [HBsAg]-positive persons; adults younger than age 60 years with diabetes mellitus or aged 60 years or older with diabetes mellitus based on individual clinical decision; adults in predialysis care or receiving hemodialysis or peritoneal dialysis; recent or current injection drug users; health care and public safety workers at risk for exposure to blood or blood-contaminated body fluids)
  - Sexual exposure risk (e.g., sex partners of HBsAg-positive persons; sexually active persons not in a mutually monogamous relationship; persons seeking evaluation or treatment for a sexually transmitted infection; and men who have sex with men [MSM])
  - Receive care in settings where a high proportion of adults have risks for hepatitis B infection (e.g., facilities providing sexually transmitted disease treatment, drug-abuse treatment and prevention services, hemodialysis and end-stage renal disease programs, institutions for developmentally disabled persons, health care settings targeting services to injection drug users or MSM, HIV testing and treatment facilities, and correctional facilities)
  - Travel to countries with high or intermediate hepatitis B endemicity

9. Hepatitis B vaccination
www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/hepb.html

General information
- Administer to adults who have a specific risk (see below), or lack a risk factor but want protection, 3-dose series of single antigen hepatitis B vaccine (HepB) or combined hepatitis A and hepatitis B vaccine (HepA-HepB) at 0, 1, and 6 months (minimum intervals: 4 weeks between doses 1 and 2 for HepB and HepA-HepB; between doses 2 and 3, 8 weeks for HepB and 5 months for HepA-HepB)

Special populations
- Administer HepB or HepA-HepB to adults with the following indications:
  - Close, personal contact with an international adoptee (e.g., household or regular babysitting) during the first 60 days after arrival in the United States from a country with high or intermediate endemicity (administer the first dose as soon as the adoption is planned)
  - Healthy adults through age 40 years who have recently been exposed to hepatitis A virus; adults older than age 40 years may receive HepA if hepatitis A immunoglobulin cannot be obtained

11. Haemophilus influenzae type b vaccination
www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/hib.html

Special populations: Serogroups A, C, W, and Y meningococcal vaccine (MenACWY)

- Administer 2 doses of MenACWY at least 8 weeks apart and revaccinate with 1 dose of MenACWY every 5 years, if the risk remains, to adults with the following indications:
  - Anatomical or functional asplenia (including sickle cell disease and other hemoglobinopathies)
  - HIV infection
  - Persistent complement component deficiency
  - Eculizumab use

- Administer 1 dose of MenACWY and revaccinate with 1 dose of MenACWY every 5 years, if the risk remains, to adults with the following indications:
  - Travel to or live in countries where meningococcal disease is hyperendemic or epidemic, including countries in the African meningitis belt or during the Hajj
  - At risk from a meningococcal disease outbreak attributed to serogroup A, C, W, or Y
  - Microbiologists routinely exposed to Neisseria meningitidis
  - Military recruits
  - First-year college students who live in residential housing (if they did not receive MenACWY at age 16 years or older)

General Information: Serogroup B meningococcal vaccine (MenB)

- May administer, based on individual clinical decision, to young adults and adolescents aged 16–23 years (preferred age is 16–18 years) who are not at increased risk 2-dose series of MenB-4C (Bexsero) at least 1 month apart or 2-dose series of MenB-FHbp (Trumenba) at least 6 months apart
  - MenB-4C and MenB-FHbp are not interchangeable

Special populations: MenB

- Administer 2-dose series of MenB-4C at least 1 month apart or 3-dose series of MenB-FHbp at 0, 1–2, and 6 months to adults with the following indications:
  - Anatomical or functional asplenia (including sickle cell disease)
  - Persistent complement component deficiency
  - Eculizumab use
  - At risk from a meningococcal disease outbreak attributed to serogroup B
  - Microbiologists routinely exposed to Neisseria meningitidis

10. Meningococcal vaccination
www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/mening.html

Special populations: Serogroups A, C, W, and Y meningococcal vaccine (MenACWY)

- Administer to adults aged 19 through 64 years with the following chronic conditions 1 dose of PPSV23 (at age 65 years or older, administer 1 dose of PCV13, if not previously received, and another dose of PPSV23 at least 1 year after PCV13 and at least 5 years after PPSV23)
  - Chronic heart disease (excluding hypertension)
  - Chronic lung disease
  - Chronic liver disease
  - Alcoholism
  - Diabetes mellitus
  - Cigarette smoking

- Administer to adults aged 19 years or older with the following indications 1 dose of PCV13 followed by 1 dose of PPSV23 at least 8 weeks after PCV13, and a second dose of PPSV23 at least 5 years after the first dose of PPSV23 (if the most recent dose of PPSV23 was administered before age 65 years, at age 65 years or older, administer another dose of PPSV23 at least 5 years after the last dose of PPSV23):
  - Immune-deficiency disorders (including B- and T-lymphocyte deficiency, complement deficiencies, and phagocytic disorders)
  - HIV infection
  - Anatomical or functional asplenia (including sickle cell disease and other hemoglobinopathies)
  - Chronic renal failure and nephrotic syndrome

- Administer to adults aged 19 years or older with the following indications 1 dose of PCV13 followed by 1 dose of PPSV23 at least 8 weeks after PCV13 (if the dose of PPSV23 was administered before age 65 years, at age 65 years or older, administer another dose of PPSV23 at least 5 years after the last dose of PPSV23):
  - Cerebrospinal fluid leak
  - Cochlear implant
Table. Contraindications and precautions for vaccines recommended for adults aged 19 years or older*

The Advisory Committee on Immunization Practices (ACIP) recommendations and package inserts for vaccines provide information on contraindications and precautions related to vaccines. Contraindications are conditions that increase chances of a serious adverse reaction in vaccine recipients and the vaccine should not be administered when a contraindication is present. Precautions should be reviewed for potential risks and benefits for vaccine recipients.

### Contraindications and precautions for vaccines routinely recommended for adults

<table>
<thead>
<tr>
<th>Vaccine(s)</th>
<th>Contraindications</th>
<th>Precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>All vaccines routinely recommended for adults</td>
<td>Severe reaction, e.g., anaphylaxis, after a previous dose or to a vaccine component</td>
<td>Moderate or severe acute illness with or without fever</td>
</tr>
</tbody>
</table>

#### Additional contraindications and precautions for vaccines routinely recommended for adults

<table>
<thead>
<tr>
<th>Vaccine(s)</th>
<th>Additional Contraindications</th>
<th>Additional Precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>IIV³</td>
<td>Severe reaction, e.g., anaphylaxis, after a previous dose or to a vaccine component</td>
<td>History of Guillain-Barré syndrome within 6 weeks after previous influenza vaccination</td>
</tr>
<tr>
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<td>Egg allergy other than hives, e.g., angioedema, respiratory distress, lightheadedness, or recurrent emesis; or required epinephrine or another emergency medical intervention (IIV may be administered in an inpatient or outpatient medical setting and under the supervision of a health care provider who is able to recognize and manage severe allergic conditions)</td>
</tr>
<tr>
<td>RIV³</td>
<td>For pertussis-containing vaccines: eencephalopathy, e.g., coma, decreased level of consciousness, or prolonged seizures, not attributable to another identifiable cause within 7 days of administration of a previous dose of a vaccine containing tetanus or diphtheria toxoid or acellular pertussis</td>
<td>Guillain-Barré syndrome within 6 weeks after a previous dose of tetanus toxoid-containing vaccine</td>
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<tr>
<td></td>
<td></td>
<td>History of Arthus-type hypersensitivity reactions after a previous dose of tetanus or diphtheria toxoid-containing vaccine. Defer vaccination until at least 10 years have elapsed since the last tetanus toxoid-containing vaccine</td>
</tr>
<tr>
<td></td>
<td></td>
<td>For pertussis-containing vaccine, progressive or unstable neurologic disorder, uncontrolled seizures, or progressive encephalopathy (until a treatment regimen has been established and the condition has stabilized)</td>
</tr>
<tr>
<td>MMR³</td>
<td>Severe immunodeficiency, e.g., hematologic and solid tumors, chemotherapy, congenital immunodeficiency or long-term immunosuppressive therapy, human immunodeficiency virus (HIV) infection with severe immunocompromise</td>
<td>Recent (within 11 months) receipt of antibody-containing blood product (specific interval depends on product)*</td>
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<tr>
<td></td>
<td></td>
<td>History of thrombocytopenia or thrombocytopenic purpura</td>
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<tr>
<td></td>
<td></td>
<td>Need for tuberculin skin testing*</td>
</tr>
<tr>
<td>VAR³</td>
<td>Severe immunodeficiency, e.g., hematologic and solid tumors, chemotherapy, congenital immunodeficiency or long-term immunosuppressive therapy, HIV infection with severe immunocompromise</td>
<td>Recent (within 11 months) receipt of antibody-containing blood product (specific interval depends on product)*</td>
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<td></td>
<td>Receipt of specific antiviral drugs (acyclovir, famciclovir, or valacyclovir) 24 hours before vaccination (avoid use of these antiviral drugs for 14 days after vaccination)</td>
</tr>
<tr>
<td>ZVL²</td>
<td>Severe immunodeficiency, e.g., hematologic and solid tumors, chemotherapy, congenital immunodeficiency or long-term immunosuppressive therapy, HIV infection with severe immunocompromise</td>
<td>Receipt of specific antiviral drugs (acyclovir, famciclovir, or valacyclovir) 24 hours before vaccination (avoid use of these antiviral drugs for 14 days after vaccination)</td>
</tr>
<tr>
<td>HPV vaccine</td>
<td>Severe allergic reaction to any vaccine containing diphtheria toxoid</td>
<td>Pregnancy</td>
</tr>
<tr>
<td>PCV13</td>
<td>Severe allergic reaction to any vaccine containing diphtheria toxoid</td>
<td>Pregnancy</td>
</tr>
</tbody>
</table>


2. MMR may be administered together with VAR or ZVL on the same day. If not administered on the same day, separate live vaccines by at least 28 days.

3. Immunosuppressive steroid dose is considered to be daily receipt of 20 mg or more prednisone or equivalent for 2 or more weeks. Vaccination should be deferred for at least 1 month after discontinuation of immunosuppressive steroid therapy. Providers should consult ACIP recommendations for complete information on the use of specific live vaccines among persons on immune-suppressing medications or with immune suppression because of other reasons.

4. Vaccine should be deferred for the appropriate interval if replacement immune globulin products are being administered. See: Best practices guidance of the Advisory Committee on Immunization Practices (ACIP). Available at www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html.

5. Measles vaccination may temporarily suppress tuberculin reactivity. Measles-containing vaccine may be administered on the same day as tuberculin skin testing, or should be postponed for at least 4 weeks after vaccination.


### Abbreviations of vaccines

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>IIV</td>
<td>inactivated influenza vaccine</td>
</tr>
<tr>
<td>RIV</td>
<td>recombinant influenza vaccine</td>
</tr>
<tr>
<td>Tdap</td>
<td>tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine</td>
</tr>
<tr>
<td>Td</td>
<td>tetanus and diphtheria toxins</td>
</tr>
<tr>
<td>MMR</td>
<td>measles, mumps, and rubella vaccine</td>
</tr>
<tr>
<td>VAR</td>
<td>recombinant zoster vaccine</td>
</tr>
<tr>
<td>RZV</td>
<td>zoster vaccine live</td>
</tr>
<tr>
<td>ZVL</td>
<td>human papillomavirus vaccine</td>
</tr>
<tr>
<td>PCV13</td>
<td>13-valent pneumococcal conjugate vaccine</td>
</tr>
<tr>
<td>PPSV23</td>
<td>23-valent pneumococcal polysaccharide vaccine</td>
</tr>
<tr>
<td>HepA</td>
<td>hepatitis A vaccine</td>
</tr>
<tr>
<td>HepA-HepB</td>
<td>hepatitis A and hepatitis B vaccines</td>
</tr>
<tr>
<td>HepB</td>
<td>hepatitis B vaccine</td>
</tr>
<tr>
<td>MenACWY</td>
<td>serogroups A, C, W, and Y meningococcal vaccine</td>
</tr>
<tr>
<td>MenB</td>
<td>serogroup B meningococcal vaccine</td>
</tr>
<tr>
<td>Hib</td>
<td>Haemophilus influenzae type b vaccine</td>
</tr>
</tbody>
</table>
## GET WELLTHY PREVENTIVE CANCER SCREENINGS

<table>
<thead>
<tr>
<th>Cancer Screening &amp; Link</th>
<th>Population</th>
<th>USPSTF Recommendation</th>
<th>Grade*</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRCA-Related Cancer: Risk Assessment, Genetic Counseling, and Genetic Testing</td>
<td>Women who have Family Members with Breast, Ovarian, Tubal, or Peritoneal Cancer</td>
<td>The USPSTF recommends that primary care providers screen women who have family members with breast, ovarian, tubal, or peritoneal cancer with 1 of several screening tools designed to identify a family history that may be associated with an increased risk for potentially harmful mutations in breast cancer susceptibility genes (BRCA1 or BRCA2). Women with positive screening results should receive genetic counseling and, if indicated after counseling, BRCA testing.</td>
<td>B</td>
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<tr>
<td>Women Whose Family History is not Associated with an Increased Risk</td>
<td></td>
<td></td>
<td>D</td>
</tr>
<tr>
<td>Cervical Cancer Screening</td>
<td>Women 21 to 65 (Pap Smear) or 30-65 (in combo with HPV testing)</td>
<td>The USPSTF recommends screening for cervical cancer in women age 21 to 65 years with cytology (Pap smear) every 3 years or, for women age 30 to 65 years who want to lengthen the screening interval, screening with a combination of cytology and human papill</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>Women younger than 30 years, HPV testing</td>
<td>The USPSTF recommends against screening for cervical cancer with HPV testing, alone or in combination with cytology, in women younger than age 30 years.</td>
<td>D</td>
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<tr>
<td></td>
<td>Women younger than 21</td>
<td>The USPSTF recommends against screening for cervical cancer in women younger than age 21 years.</td>
<td>D</td>
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<tr>
<td></td>
<td>Women Older than 65, who have had adequate prior screening</td>
<td>The USPSTF recommends against screening for cervical cancer in women older than age 65 years who have had adequate prior screening and are not otherwise at high risk for cervical cancer. See the Clinical Considerations for discussion of adequacy of prior screening and risk factors.</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>Women who have had a hysterectomy</td>
<td>The USPSTF recommends against screening for cervical cancer in women who have had a hysterectomy with removal of the cervix and who do not have a history of a high-grade precancerous lesion (cervical intraepithelial neoplasia [CIN] grade 2 or 3) or cervical cancer.</td>
<td>D</td>
</tr>
<tr>
<td>Breast Cancer Screening</td>
<td>Women aged 50 to 74 years</td>
<td>The USPSTF recommends biennial screening mammography for women aged 50 to 74 years.</td>
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<tr>
<td></td>
<td>Women aged 40 to 49 years</td>
<td>The decision to start screening mammography in women prior to age 50 years should be an individual one. Women who place a higher value on the potential benefit than the potential harms may choose to begin biennial screening between the ages of 40 and 49 years.</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• For women who are at average risk for breast cancer, most of the benefit of mammography results from biennial screening during ages 50 to 74 years. Of all of the age groups, women aged 60 to 69 years are most likely to avoid breast cancer death through mammography screening. While screening mammography in women aged 40 to 49 years may reduce the risk for breast cancer death, the number of deaths averted is smaller than that in older women and the number of false-positive results and unnecessary biopsies is larger. The balance of benefits and harms is likely to improve as women move from their early to late 40s.</td>
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<td></td>
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<td>• In addition to false-positive results and unnecessary biopsies, all women undergoing regular screening mammography are at risk for the diagnosis and treatment of noninvasive and invasive breast cancer that would otherwise not have become a threat to their health, or even apparent, during their lifetime (known as “overdiagnosis”). Beginning mammography screening at a younger age and screening more frequently may increase the risk for overdiagnosis and subsequent overtreatment.</td>
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<tr>
<td></td>
<td></td>
<td>• Women with a parent, sibling, or child with breast cancer are at higher risk for breast cancer and thus may benefit more than average-risk women from beginning screening in their 40s.</td>
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<td></td>
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<td>Go to the Clinical Considerations section for information on implementation of the C recommendation.</td>
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<tr>
<td></td>
<td>Women aged 75 years or older</td>
<td>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening mammography in women aged 75 years or older.</td>
<td>I</td>
</tr>
<tr>
<td></td>
<td>All women</td>
<td>The USPSTF concludes that the current evidence is insufficient to assess the benefits and harms of digital breast tomosynthesis (DBT) as a primary screening method for breast cancer.</td>
<td>I</td>
</tr>
<tr>
<td></td>
<td>Women with dense breasts</td>
<td>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of adjunctive screening for breast cancer using breast ultrasonography, magnetic resonance imaging, DBT, or other methods in women identified to have dense breasts on an otherwise negative screening mammogram.</td>
<td>I</td>
</tr>
</tbody>
</table>
The USPSTF recommends screening for colorectal cancer starting at age 50 years and continuing until age 75 years. The risks and benefits of different screening methods vary. See the Clinical Considerations section and the Table for details about screening strategies.

Adults aged 76 to 85 years

The decision to screen for colorectal cancer in adults aged 76 to 85 years should be an individual one, taking into account the patient’s overall health and prior screening history.

Adults in this age group who have never been screened for colorectal cancer are more likely to benefit.

Screening would be most appropriate among adults who 1) are healthy enough to undergo treatment if colorectal cancer is detected and 2) do not have comorbid conditions that would significantly limit their life expectancy.

The decision to screen for colorectal cancer in adults aged 76 to 85 years should be an individual one, taking into account the patient’s overall health and prior screening history.

Bladder Cancer in Adults: Screening

The USPSTF concludes the current evidence is insufficient to assess the balance of benefits and harms of screening for bladder cancer in asymptomatic adults.

Lung Cancer: Screening

Adults Aged 55-80, with a History of Smoking

The USPSTF recommends annual screening for lung cancer with low-dose computed tomography (LDCT) in adults aged 55 to 80 years who have a 30 pack-year smoking history and currently smoke or have quit within the past 15 years. Screening should be discontinued once a person has not smoked for 15 years or develops a health problem that substantially limits life expectancy or the ability or willingness to have curative lung surgery.

Oral Cancer: Screening

Asymptomatic Adults

The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for oral cancer in asymptomatic adults.

Ovarian Cancer: Screening

Asymptomatic women

The USPSTF recommends against screening for ovarian cancer in asymptomatic women.

Pancreatic Cancer: Screening

Asymptomatic Adults

The USPSTF recommends against routine screening for pancreatic cancer in asymptomatic adults using abdominal palpation, ultrasonography, or serologic markers.

Prostate Cancer: Screening

Men

The U.S. Preventive Services Task Force (USPSTF) recommends against prostate-specific antigen (PSA)-based screening for prostate cancer. *MMIA GetWellthy will not incentivize the PSA.

Skin Cancer: Screening

Asymptomatic adults

The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of visual skin examination by a clinician to screen for skin cancer in adults.

Testicular Cancer: Screening

Adolescent and Adult Men

The USPSTF recommends against screening for testicular cancer in adolescent or adult men.

Thyroid Cancer: Screening

Adults

The USPSTF recommends against screening for thyroid cancer in asymptomatic adults.

*The USPSTF assignes one of five letter grades (A,B,C,D, or I). The USPSTF changed its grade definitions based on a change in methods in May 2007 and again in July 2012, when it updated the definition of and suggestions for practice for the grade C recommendation. See:
https://www.uspreventiveservicestaskforce.org/Page/Name/grade-definitions

These recommendations are from the U.S. Preventive Services Task Force (USPSTF). The USPFTF is an independent panel of experts in primary care and prevention who who systematically reviews the evidence of effectiveness and develops recommendations for clinical preventive services. For further information, please visit the USPFTF website below:
https://www.uspreventiveservicestaskforce.org/