



PREVENTIVE HEALTH CARE GUIDELINES

These guidelines are based on the recommendations by the United States Preventive Services Task Force (USPSTF), the Centers for Disease Control and Prevention (CDC), the American Academy of Family Practitioners (AAFP), and the American Academy of Pediatrics (AAP)/Bright Futures.

Introduction

Health Plan of Nevada and Sierra Health and Life suggest that health plan members get certain screening tests, exams and shots to stay healthy. This document gives our health plan members and doctors in the health plan's network guidelines about when and how often to get preventive care. This advice is not designed to take the place of your doctor's judgement about your own health care needs.

Please talk with your doctor about any questions or concerns. Your doctor may make changes to these guidelines based on your own needs. Please refer to your health plan's Evidence of Coverage and plan documents for details about the coverage and costs to you for these preventive services.

Section 1: General Preventive Screening Tests and Exams for Children, Teens and Adults

Item	Gender		Adults	Newborns, Children and/or Teens	Comments About Screening Test, Counseling, Exam or Shot
	Male	Female			
Abdominal Aortic Aneurysm Screening Test	X	N/A	X	Adults only	This screening test is a one-time test for men between the ages of 65-75 years old who have smoked even if there are no symptoms.
Alcohol Abuse: Screening and Behavioral Counseling Intervention in Primary Care to Reduce Unhealthy Alcohol Use in Adults	X	X	X	Adults only	Screening for adults aged 18 years or older for alcohol misuse and provide persons engaged in risky or hazardous drinking with brief behavioral counseling to reduce alcohol misuse.
Autism Screening	X	X	N/A	X	A formal, standardized developmental screen is recommended during the 9 month and 30 month visit. A formal, standardized developmental screen is recommended during the 18 month visit, including formal autism screen. A formal, standardized autism screen is recommended during the 24 month visit.
Bacteriuria Screening	N/A	X	X	Adults only	Screening for asymptomatic bacteriuria with urine culture for pregnant women at 12-16 weeks gestation or at the first prenatal visit, if later.
Breast Cancer Screening - Mammogram	N/A	X	X	Adults only	This screening is recommended with or without clinical breast examination (CBE) every 1-2 years for women aged 40 years or older. <i>Nevada Revised Statutes, NRS 695C.1735</i> states a mammogram every 2 years, or annually if ordered by a provider of health care, for women aged 40 years or older.
Breast Genetic Counseling and Evaluation for BRCA Testing	N/A	X	X	Adults only	This screening is for women who have a family member with breast, ovarian, tubal, or peritoneal cancer with one 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.

Item	Gender		Adults	Newborns, Children and/or Teens	Comments About Screening Test, Counseling, Exam or Shot
	Male	Female			
Breast Cancer - Chemoprevention	N/A	X	X	Adults only	USPSTF recommends that clinicians discuss chemoprevention with women at high risk for breast cancer and at low risk for adverse medication effects.
Behavioral Counseling in Primary Care to Promote a Healthy Diet and Physical Activity for Cardiovascular Disease Prevention in Adults with Risk Factors	X	X	X	Adults only	USPSTF recommends offering or referring adults who have cardiovascular disease (CVD) risk factors to intensive behavior counseling interventions to promote a healthy diet and physical activity for CVD prevention.
Cervical Cancer Screening - Pap Smear	N/A	X	X	Adults only	A cervical cancer screening is recommended for average risk women aged 21-65 years. For women aged 21-29 years, a cervical cancer screening using cervical cytology (Pap smear) is recommended every 3 years. Women aged 30-65 years should be screened with cytology and human papillomavirus testing every 5 years or cervical cytology alone every 3 years.
Chlamydia Infection Screening	N/A	X	X	X	This screening test is for all sexually active non-pregnant women aged 24 years and younger and older women at increased risk for infection. This applies to all sexually active adolescents and adult women, including pregnant women. Bright Futures recommends sexually transmitted infection screening be conducted if risk assessment is positive between ages 11-21 years.

Item	Gender		Adults	Newborns, Children and/or Teens	Comments About Screening Test, Counseling, Exam or Shot
	Male	Female			
Cholesterol Screening - Lipid Disorders Screening	X	X	X	Adults only	<p>The USPSTF recommends that this screening test is for all adults without a history of cardiovascular disease (CVD) (i.e. symptomatic coronary artery disease or ischemic stroke) use a low to moderate dose statin for the prevention of CVD events and mortality when all of the following criteria are met:</p> <ol style="list-style-type: none"> 1. They are aged 40-75 years; 2. They have 1 or more CVD risk factors (i.e. dyslipidemia, diabetes, hypertension or smoking); 3. They have a calculated 10 year risk of a cardiovascular event of 10% or greater. <p>Identification of dyslipidemia and calculation of 10 year CVD event risk requires universal lipids screening in adults aged 40-75 years.</p> <p>See Dyslipidemia Screening (Pediatric) for recommendations for children.</p>
Colorectal Cancer Screening: Fecal Occult Blood Test (FOBT), Fecal Immunochemical Test (FIT), Sigmoidoscopy and Colonoscopy	X	X	X	Adults only	<p>USPSTF recommends screening starting at age 45 years and continuing until age 75 years.</p>
Contraceptive Methods (Including Sterilizations)	N/A	X	X	X	<p>Adolescent and adult women have access to the full range of female-controlled contraceptives to prevent unintended pregnancy and improve birth outcomes. Contraceptive care should include contraceptive counseling, initiation of contraception use and follow-up care (e.g. management and evaluation as well as change of and removal or discontinuation of contraceptive method). The Women's Preventive Services Initiative recommends that the full range of U.S. Food and Drug Administration (FDA) approved contraceptive methods, effective family planning practices and sterilization procedures be available as part of contraceptive care. Additionally, instruction in fertility awareness based methods, including the lactation amenorrhea method, although less effective, should be provided for women desiring an alternative method.</p>

Item	Gender		Adults	Newborns, Children and/or Teens	Comments About Screening Test, Counseling, Exam or Shot
	Male	Female			
Depression in Adults - Screening	X	X	X	Adults only	This screening is for the general adult population including pregnant and postpartum women. Screening should be implemented with adequate systems in place to ensure accurate diagnosis, effective treatment and appropriate follow-up.
Depression in Children and Adolescents - Screening	X	X	N/A	X	This screening is for adolescents between the ages of 12-18 years for major depressive disorder (MDD). Screening should be implemented with adequate systems in place to ensure accurate diagnosis, effective treatment and appropriate follow-up. Bright Futures Periodicity Schedule recommends depression screening begins at age 12 though to 21 years.
Diabetes Screening	X	X	X	Adults only	USPSTF recommends screening for abnormal blood glucose as part of cardiovascular risk assessment in adults aged 40-70 years who are overweight or obese. Clinicians should offer to refer patients with abnormal blood glucose to intensive behavioral counseling interventions to promote a healthy diet and physical activity. USPSTF recommends screening for gestational diabetes mellitus in asymptomatic pregnant women after 24 weeks of gestation.
Dyslipidemia Screening - Pediatric	X	X	N/A	X	Screening lab work: conduct if risk assessment is positive or, at the following intervals; once between ages 9-11 years and once between ages 17-21 years. Risk assessment: Recommended at 24 months, 4 years, 6 years, 8 years, 12 years, 13 years, 14 years, 15 years and 16 years.

Item	Gender		Adults	Newborns, Children and/or Teens	Comments About Screening Test, Counseling, Exam or Shot
	Male	Female			
Fluoride Application in Primary Care	X	X	N/A	X	Recommended for children from birth through age 5 years. It is recommended that primary care clinicians apply fluoride varnish to the primary teeth of all infants and children starting at the age of primary tooth eruption. For high risk children, consider application of fluoride varnish for caries prevention every 3-6 months between ages 6 months to 5 years.
Gonorrhea Screening	N/A	X	X	X	USPSTF recommends screening for gonorrhea in sexually active women aged 24 years and younger and in older women who are at increased risk for infection. Bright Futures recommends sexually transmitted infection screening be conducted if risk assessment is positive between ages 11-21 years.
Hearing Screening - Pediatric	X	X	N/A	X	Bright Futures recommends hearing screening at ages: newborn between 3-5 days old to 2 months old, 4 years, 5 years, 6 years, 8 years, 10 years, once between ages 11-14 years, once between ages 15-17 years and once between ages 18-21 years. Screening is also recommended for those that have a positive risk assessment. Risk assessment is recommended at ages 4 months, 6 months, 9 months, 12 months, 15 months, 18 months, 24 months, 30 months, 3 years, 7 years and 9 years of age.
Hepatitis B Virus Infection Screening	X	X	X	Adults only	USPSTF recommends screening for hepatitis B infection in persons at high risk for infection and pregnant women at their first prenatal visit.
Hepatitis C Virus Infection Screening	X	X	X	Adults only	This screening is for persons at high risk for infection. There is a recommended one time screening for all adults born between 1945 and 1965.
High Blood Pressure in Adults – Screening	X	X	X	Adults only	This screening test is for adults aged 18 years of age or older. The USPSTF recommends obtaining measurements outside of the clinical setting for diagnostic confirmation before starting treatment.

Item	Gender		Adults	Newborns, Children and/or Teens	Comments About Screening Test, Counseling, Exam or Shot
	Male	Female			
Human Immunodeficiency Virus (HIV) – Screening for Adolescents and Adults	X	X	X	X	<p>This screening is for HIV infection in adolescents and adults aged 15-65 years. Younger adolescents and older adults who are at increased risk should also be screened.</p> <p>This screening is also for pregnant women, including those who present in labor who are untested and whose HIV status is unknown.</p> <p>Bright Futures recommends HIV screening lab work be conducted once between ages 15-18 years. It is also recommended anytime between ages 11-14 years and 19-21 years when a risk assessment is positive.</p>
Human Papillomavirus DNA Testing	N/A	X	X	Adults only	This screening test is recommended every 5 years for women who are 30 years or older who have normal pap smear results.
Hypothyroidism Screening – Newborn	X	X	N/A	X	This screening test is for all newborn infants from birth to 90 days old.
Intimate Partner Violence Screening	N/A	X	X	X	The USPSTF recommends that clinicians screen for intimate partner violence in women of reproductive age and provider or refer women who screen positive to ongoing support services.
Latent Tuberculosis Infection (LTBI) Screening	X	X	X	Adults only	The USPSTF recommends screening for LBTI in populations at increased risk. This recommendation applies to asymptomatic adults 18 years and older.
Obesity Screening – Adults	X	X	X	Adults only	This screening is for all adults. Clinicians should offer or refer patients with a body mass index (BMI) of 30kg/m ² or higher to intensive, multicomponent behavioral interventions.
Obesity Screening – Children and Adolescents	X	X	N/A	X	This screening is recommended for children and adolescents 6 years and older. Clinicians should offer or refer to a comprehensive, intensive behavioral intervention to promote improvements in weight status.
Osteoporosis Screening	N/A	X	X	Adults only	This screening is for women aged 65 and older and in postmenopausal women younger than 65 years who are at increased risk of osteoporosis.

Item	Gender		Adults	Newborns, Children and/or Teens	Comments About Screening Test, Counseling, Exam or Shot
	Male	Female			
Other Tests and Exams for Children From Birth to 21 Years	X	X	N/A	X	Other tests and exams for children and teens from birth to 21 years may be considered preventive. These tests and exams are covered according to individual benefit plans. Please refer to your health plan documents to determine you and your family's specific coverage.
Phenylketonuria (PKU) Screening	X	X	N/A	X	This screening test is for all newborn infants from birth to 90 days old.
Primary Care Interventions to Prevent Tobacco Use in Adults and Children	X	X	X	X	<p>The USPSTF recommends that clinicians ask all adults about tobacco use, advise them to stop using tobacco, and provide behavioral interventions and U.S. Food and Drug Administration (FDA) approved pharmacotherapy for cessation to those who use tobacco.</p> <p>USPSTF recommends that primary care clinicians provide interventions, including education or brief counseling, to prevent initiation of tobacco use among school-aged children and adolescents.</p> <p>Bright Futures recommends tobacco use assessments from age 11-21 years.</p>
Rh(D) Incompatibility Screening	N/A	X	X	X	Rh(D) blood typing and antibody testing is recommended for all pregnant women during their first visit for pregnancy-related care. Repeated Rh(D) antibody testing for all unsensitized Rh(D) negative women at 24-28 weeks gestations, unless biological father is known to be Rh(D) negative.
Screening for Lung Cancer with Low-Dose Computer Tomography	X	X	X	Adults only	USPSTF recommends annual screening for lung cancer with low-dose computer tomography for adults aged 50-80 years who have a 20 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.
Sexually Transmitted Infections - Behavioral Counseling for Prevention	X	X	X	X	Behavioral counseling for all sexually active adolescents and for adults who are at increased risk for sexually transmitted infections (STI).
Sickle Cell Screening - Newborn	X	X	N/A	X	This screening test is for all newborn infants from birth to 90 days old.

Item	Gender		Adults	Newborns, Children and/or Teens	Comments About Screening Test, Counseling, Exam or Shot
	Male	Female			
Skin Cancer Prevention - Behavioral Counseling	X	X	X	X	USPSTF recommends counseling young adults, adolescents, children and parents of young children about minimizing exposure to ultraviolet (UV) radiation for persons ages 6 months to 24 years with fair skin types to reduce their risk of skin cancer.
Syphilis Screening	X	X	X	X	USPSTF recommends screening for syphilis infection in persons who are at increased risk for infection (asymptomatic, non-pregnant adults and adolescents who are at increased risk for syphilis infection). USPSTF recommends that clinicians screen all pregnant women for syphilis infection. Bright Futures recommends sexually transmitted infection screening be conducted if risk assessment is positive between ages 11-21 years.
Screening for Visual Impairment in Children	X	X	N/A	X	USPSTF recommends vision screening at least once in all children aged 3-5 years to detect amblyopia or its risk factors. Bright Futures recommends instrument-based screening for children ages 1-5 years if the screening is available and ages 6 years and older if unable to test visual acuity monocularly with age appropriate optotypes.
Wellness Examinations (Well Baby, Well Child and Well Adult)	X	X	X	X	Wellness exams include an initial preventive medicine evaluation and management of an individual. This exam includes an age and gender appropriate history, exam, counseling/anticipatory guidance/risk factor reduction strategies and the ordering of laboratory and diagnostic procedures. These include breastfeeding support and counseling and follow-up care, domestic violence screening, annual HIV counseling, well woman visits and screening for urinary incontinence.

Section 2: Preventive Screening Tests and Exams for Pregnant Women

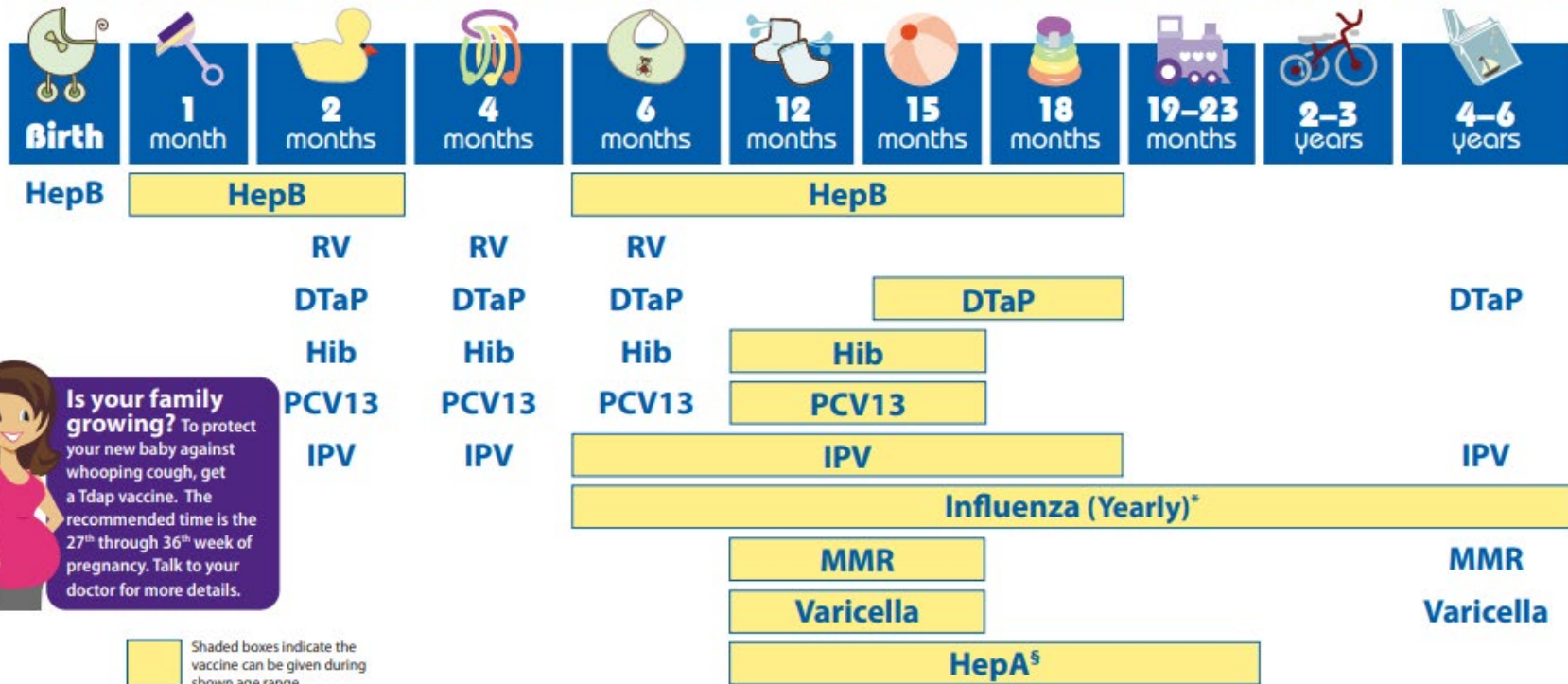
Screening	Comments
Bacteriuria Screening	Screening for asymptomatic bacteriuria with urine culture for pregnancy women at 12-16 weeks gestation or at the first prenatal visit, if later.
Chlamydia Screening	Screening test is for all sexually active women, including pregnant women, 24 years of age or younger and in older women who are at increased risk for infection.
Gestational Diabetes Screening	Screening pregnant women for gestational diabetes mellitus after 24 weeks of gestation.
Gonorrhea Screening	Screening test is for all sexually active women, including pregnant women, 24 years of age or younger and in older women who are at increased risk of infection.
Hepatitis B Virus Infection Screening	Screening for hepatitis B virus infection in pregnant women at their first prenatal visit.
Human Immunodeficiency Virus (HIV) Infection Screening	This screening is for all adults and adolescents at risk for HIV. This also applies to pregnant women including those present in labor or at delivery who are untested and whose HIV status is unknown.
Preeclampsia Screening	The USPSTF recommends screening for preeclampsia in pregnant women with blood pressure measurements throughout pregnancy.
Rh(D) Incompatibility Screening	This screening test is for all pregnant women during their first prenatal visit. Repeat testing is for all unsensitized Rh(D) negative women at 24-48 weeks gestation, unless the biological father is known to be Rh(D) negative.
Syphilis Screening	This screening test is for all pregnant women at their first prenatal visit.
Tobacco Smoking Cessation in Adults Including Pregnant Women: Behavioral and Pharmacotherapy Interventions	The USPSTF recommends that clinicians ask all pregnant women about tobacco use and advise them to stop using tobacco, and provide behavioral interventions for cessation.
Wellness Visits (Preconception, Prenatal & Postpartum)	Well woman preventive care visit annually for adult women to obtain the recommended preventive services that are age and developmentally appropriate, including preconception and prenatal care.

Section 3: Immunizations/Shots for Adults, Children and Teens

Please refer to the most current immunization (shot) recommendations to find out which immunizations are right for you and your family. These recommendations are revised each year by the Centers by Disease Control and Prevention (CDC).

For more information, please visit the CDC website at: www.cdc.gov

2022 Recommended Immunizations for Children from Birth Through 6 Years Old



Is your family growing? To protect your new baby against whooping cough, get a Tdap vaccine. The recommended time is the 27th through 36th week of pregnancy. Talk to your doctor for more details.

Shaded boxes indicate the vaccine can be given during shown age range.

COVID-19 VACCINATION IS RECOMMENDED FOR AGES 6 MONTHS AND OLDER.

NOTE:
If your child misses a shot, you don't need to start over. Just go back to your child's doctor for the next shot. Talk with your child's doctor if you have questions about vaccines.

FOOTNOTES:
* Two doses given at least four weeks apart are recommended for children age 6 months through 8 years of age who are getting an influenza (flu) vaccine for the first time and for some other children in this age group.
§ Two doses of HepA vaccine are needed for lasting protection. The first dose of HepA vaccine should be given between 12 months and 23 months of age. The second dose should be given 6 months after the first dose. All children and adolescents over 24 months of age who have not been vaccinated should also receive 2 doses of HepA vaccine.
If your child has any medical conditions that put him at risk for infection or is traveling outside the United States, talk to your child's doctor about additional vaccines that he or she may need.

See back page for more information on vaccine-preventable diseases and the vaccines that prevent them.

For more information, call toll-free
1-800-CDC-INFO (1-800-232-4636)
or visit
www.cdc.gov/vaccines/parents



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention



American Academy of Pediatrics



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Vaccine-Preventable Diseases and the Vaccines that Prevent Them

Disease	Vaccine	Disease spread by	Disease symptoms	Disease complications
Chickenpox	Varicella vaccine protects against chickenpox.	Air, direct contact	Rash, tiredness, headache, fever	Infected blisters, bleeding disorders, encephalitis (brain swelling), pneumonia (infection in the lungs), death
Diphtheria	DTaP* vaccine protects against diphtheria.	Air, direct contact	Sore throat, mild fever, weakness, swollen glands in neck	Swelling of the heart muscle, heart failure, coma, paralysis, death
Hib	Hib vaccine protects against <i>Haemophilus influenzae</i> type b.	Air, direct contact	May be no symptoms unless bacteria enter the blood	Meningitis (infection of the covering around the brain and spinal cord), intellectual disability, epiglottitis (life-threatening infection that can block the windpipe and lead to serious breathing problems), pneumonia (infection in the lungs), death
Hepatitis A	HepA vaccine protects against hepatitis A.	Direct contact, contaminated food or water	May be no symptoms, fever, stomach pain, loss of appetite, fatigue, vomiting, jaundice (yellowing of skin and eyes), dark urine	Liver failure, arthralgia (joint pain), kidney, pancreatic and blood disorders, death
Hepatitis B	HepB vaccine protects against hepatitis B.	Contact with blood or body fluids	May be no symptoms, fever, headache, weakness, vomiting, jaundice (yellowing of skin and eyes), joint pain	Chronic liver infection, liver failure, liver cancer, death
Influenza (Flu)	Flu vaccine protects against influenza.	Air, direct contact	Fever, muscle pain, sore throat, cough, extreme fatigue	Pneumonia (infection in the lungs), bronchitis, sinus infections, ear infections, death
Measles	MMR** vaccine protects against measles.	Air, direct contact	Rash, fever, cough, runny nose, pink eye	Encephalitis (brain swelling), pneumonia (infection in the lungs), death
Mumps	MMR** vaccine protects against mumps.	Air, direct contact	Swollen salivary glands (under the jaw), fever, headache, tiredness, muscle pain	Meningitis (infection of the covering around the brain and spinal cord), encephalitis (brain swelling), inflammation of testicles or ovaries, deafness, death
Pertussis	DTaP* vaccine protects against pertussis (whooping cough).	Air, direct contact	Severe cough, runny nose, apnea (a pause in breathing in infants)	Pneumonia (infection in the lungs), death
Polio	IPV vaccine protects against polio.	Air, direct contact, through the mouth	May be no symptoms, sore throat, fever, nausea, headache	Paralysis, death
Pneumococcal	PCV13 vaccine protects against pneumococcus.	Air, direct contact	May be no symptoms, pneumonia (infection in the lungs)	Bacteremia (blood infection), meningitis (infection of the covering around the brain and spinal cord), death
Rotavirus	RV vaccine protects against rotavirus.	Through the mouth	Diarrhea, fever, vomiting	Severe diarrhea, dehydration, death
Rubella	MMR** vaccine protects against rubella.	Air, direct contact	Sometimes rash, fever, swollen lymph nodes	Very serious in pregnant women—can lead to miscarriage, stillbirth, premature delivery, birth defects
Tetanus	DTaP* vaccine protects against tetanus.	Exposure through cuts in skin	Stiffness in neck and abdominal muscles, difficulty swallowing, muscle spasms, fever	Broken bones, breathing difficulty, death






* DTaP combines protection against diphtheria, tetanus, and pertussis.

** MMR combines protection against measles, mumps, and rubella.

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	Flu Influenza	Tdap Tetanus, diphtheria, pertussis	HPV Human papillomavirus	Meningococcal		Pneumococcal	Dengue	Hepatitis B	Hepatitis A	Polio	MMR Measles, mumps, rubella	Chickenpox Varicella
				MenACWY	MenB							
7-8 Years	Green	Orange		Purple		Purple		Orange	Orange	Orange	Orange	Orange
9-10 Years	Green	Orange	Green, Yellow checkered	Purple		Purple	Green ONLY in places where dengue spreads	Orange	Orange	Orange	Orange	Orange
11-12 Years	Green	Orange	Green	Green		Purple	Green ONLY in places where dengue spreads	Orange	Orange	Orange	Orange	Orange
13-15 Years	Green	Orange	Orange	Orange		Purple	Green ONLY in places where dengue spreads	Orange	Orange	Orange	Orange	Orange
16-18 Years	Green	Orange	Orange	Orange	Blue	Purple	Green ONLY in places where dengue spreads	Orange	Orange	Orange	Orange	Orange
More information:	Everyone 6 months and older should get a flu vaccine every year if they do not have contraindications	All 11- through 12- year olds should get one shot of Tdap.	All 11- through 12- year olds should get a 2-shot series of HPV vaccine. A 3-shot series is needed for those with weakened immune systems and those who start the series at 15 years or older.	All 11- through 12- year olds should get one shot of meningococcal conjugate (MenACWY). A booster shot is recommended at age 16.	Ages 10 years and older at increased risk should receive a serogroup B meningococcal (MenB) vaccine. Ages 16-18 years old who are not at increased risk may be vaccinated with a MenB vaccine.		Ages 9-16 years who live in dengue endemic areas AND have laboratory confirmation of previous dengue infection					

COVID-19 vaccination is recommended for ages 6 months and older.
Talk to your child’s doctor or nurse about the vaccines recommended for their age.

-  These shaded boxes indicate when the vaccine is recommended for all children unless your doctor tells you that your child cannot safely receive the vaccine.
-  These shaded boxes indicate the vaccine is recommended for children with certain health or lifestyle conditions that put them at an increased risk for serious diseases. See vaccine-specific recommendations at www.cdc.gov/vaccines/hcp/acip-recs/.
-  These shaded boxes indicate the vaccine **SHOULD** be given if a child is catching up on missed vaccines.
-  This shaded box indicates children not at increased risk **MAY** get the vaccine if they wish after speaking to a provider.
-  This shaded box indicates children not at increased risk may get the vaccine if they wish after speaking to a provider.



Vaccine-Preventable Diseases and the Vaccines that Prevent Them

Disease	Vaccine	Disease spread by	Disease symptoms	Disease complications
Chickenpox	Varicella vaccine protects against chickenpox.	Air, direct contact	Rash, tiredness, headache, fever	Infected blisters, bleeding disorders, encephalitis (brain swelling), pneumonia (infection in the lungs), death
Dengue	Dengue vaccine protects against dengue.	Bite from infected mosquito	May be no symptom, fever, headache, pain behind the eyes, rash, joint pain, body ache, nausea, loss of appetite feeling tired, abdominal pain	Severe bleeding, seizures, shock, damage to liver, heart, and lungs, death
Diphtheria	Tdap* and Td** vaccines protect against diphtheria.	Air, direct contact	Sore throat, mild fever, weakness, swollen glands in neck	Swelling of the heart muscle, heart failure, coma, paralysis, death
Hepatitis A	HepA vaccine protects against hepatitis A.	Direct contact, contaminated food or water	May be no symptoms, fever, stomach pain, loss of appetite, fatigue, vomiting, jaundice (yellowing of skin and eyes), dark urine	Liver failure, arthralgia (joint pain), kidney, pancreatic and blood disorders, death
Hepatitis B	HepB vaccine protects against hepatitis B.	Contact with blood or body fluids	May be no symptoms, fever, headache, weakness, vomiting, jaundice (yellowing of skin and eyes), joint pain	Chronic liver infection, liver failure, liver cancer, death
Human Papillomavirus	HPV vaccine protects against human papillomavirus.	Direct skin contact	May be no symptoms, genital warts	Cervical, vaginal, vulvar, penile, anal, oropharyngeal cancers
Influenza (Flu)	Flu vaccine protects against influenza.	Air, direct contact	Fever, muscle pain, sore throat, cough, extreme fatigue	Pneumonia (infection in the lungs), bronchitis, sinus infections, ear infections, death
Measles	MMR*** vaccine protects against measles.	Air, direct contact	Rash, fever, cough, runny nose, pink eye	Encephalitis (brain swelling), pneumonia (infection in the lungs), death
Meningococcal Disease	MenACWY and MenB vaccines protect against meningococcal disease.	Air, direct contact	Sudden onset of fever, headache, and stiff neck, dark purple rash	Loss of limb, deafness, nervous system disorders, developmental disabilities, seizure disorder, stroke, death
Mumps	MMR*** vaccine protects against mumps.	Air, direct contact	Swollen salivary glands (under the jaw), fever, headache, tiredness, muscle pain	Meningitis (infection of the covering around the brain and spinal cord), encephalitis (brain swelling), inflammation of testicles or ovaries, deafness, death
Pertussis	Tdap* vaccine protects against pertussis.	Air, direct contact	Severe cough, runny nose, apnea (a pause in breathing in infants)	Pneumonia (infection in the lungs), death
Pneumococcal Disease	Pneumococcal vaccine protects against pneumococcal disease.	Air, direct contact	May be no symptoms, pneumonia (infection in the lungs)	Bacteremia (blood infection), meningitis (infection of the covering around the brain and spinal cord), death
Polio	Polio vaccine protects against polio.	Air, direct contact, through the mouth	May be no symptoms, sore throat, fever, nausea, headache	Paralysis, death
Rubella	MMR*** vaccine protects against rubella.	Air, direct contact	Sometimes rash, fever, swollen lymph nodes	Very serious in pregnant women—can lead to miscarriage, stillbirth, premature delivery, birth defects
Tetanus	Tdap* and Td** vaccines protect against tetanus.	Exposure through cuts on skin	Stiffness in neck and abdominal muscles, difficulty swallowing, muscle spasms, fever	Broken bones, breathing difficulty, death

*Tdap combines protection against diphtheria, tetanus, and pertussis.

**Td combines protection against diphtheria and tetanus.

***MMR combines protection against measles, mumps, and rubella.

If you have any questions about your child's vaccines, talk to your child's doctor or nurse.

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Table 1 Recommended Adult Immunization Schedule by Age Group, United States, 2022

Vaccine	19–26 years	27–49 years	50–64 years	≥65 years
Influenza inactivated (IIV4) or Influenza recombinant (RIV4) or Influenza live, attenuated (LAIV4)	1 dose annually			
Tetanus, diphtheria, pertussis (Tdap or Td)	1 dose Tdap each pregnancy; 1 dose Td/Tdap for wound management (see notes) 1 dose Tdap, then Td or Tdap booster every 10 years			
Measles, mumps, rubella (MMR)	1 or 2 doses depending on indication (if born in 1957 or later)			
Varicella (VAR)	2 doses (if born in 1980 or later)		2 doses	
Zoster recombinant (RZV)	2 doses for immunocompromising conditions (see notes)		2 doses	
Human papillomavirus (HPV)	2 or 3 doses depending on age at initial vaccination or condition	27 through 45 years		
Pneumococcal (PCV15, PCV20, PPSV23)	1 dose PCV15 followed by PPSV23 OR 1 dose PCV20 (see notes)			1 dose PCV15 followed by PPSV23 OR 1 dose PCV20
Hepatitis A (HepA)	2 or 3 doses depending on vaccine			
Hepatitis B (HepB)	2, 3, or 4 doses depending on vaccine or condition			
Meningococcal A, C, W, Y (MenACWY)	1 or 2 doses depending on indication, see notes for booster recommendations			
Meningococcal B (MenB)	2 or 3 doses depending on vaccine and indication, see notes for booster recommendations			
	19 through 23 years			
Haemophilus influenzae type b (Hib)	1 or 3 doses depending on indication			

 Recommended vaccination for adults who meet age requirement, lack documentation of vaccination, or lack evidence of past infection
 Recommended vaccination for adults with an additional risk factor or another indication
 Recommended vaccination based on shared clinical decision-making
 No recommendation/ Not applicable