Immunizations are one of the top 10 public health accomplishments of the 20th Century (CDC, 2016). However, vaccination rates for some diseases are not meeting national public health goals despite the fact that immunizations have significantly reduced the incidence of many serious infectious diseases (Health People 2020). Diseases that used to be common in the U.S., such as polio, measles, whooping cough, mumps, and tetanus, can be prevented via vaccination. While these diseases still exist, most infants are protected by vaccines so we don’t see these diseases nearly as often. Vaccines have prevented countless cases of disease and saved millions of lives over the past decades. Here’s a general guide to immunizations across one’s lifespan:

**Infants and Children**
Babies have some disease immunity because of protection they receive from their mother during pregnancy. This immunity, however, decreases after the first few months of life. Through vaccination, children can develop immunity without acquiring the diseases these vaccines prevent. Infants are particularly vulnerable to infectious disease, making it critical to protect them through immunization. Vaccinations can now protect children from 14 serious diseases.

**Preteens and Teens**
Immunizations are not just for infants and children. Four vaccines are recommended for preteens and teens that help protect your child, their friends, and family members. While children should get a flu vaccine each year, three other vaccines should be given when your child is 11 - 12 years old. Teens may also need a booster vaccine that requires more than one dose to be fully protected. Vaccines recommended for preteens and teens include:

1. Human papillomavirus (HPV) vaccine: Protects against some HPV infections and related cancers.
2. Meningococcal vaccine (MCV4); Protects against some of the bacteria that cause meningitis.


4. Flu Vaccine.

**Pregnant Women**
If possible, make sure your immunizations are current before becoming pregnant. Speak with your healthcare provider about your specific vaccination needs.

**Adults**
Although we place a lot of emphasis on pediatric immunization, adults are often overlooked. More than 45,000 adults a year die from diseases they could avoid via immunizations (CDC, 2016). Improper immunization among adults costs our economy millions of dollars each year due to ER visits, specialty medical care, lost productivity and absenteeism. For every $1 spent on adult immunizations, nearly $20 are saved in the workplace and on hospital stays, physician visits, and other expensive and lengthy treatments for patients who have contacted diseases that would have been easily prevented with simple, low-cost vaccinations.

**Older adults (50 years and older),** need to consider a number of different immunization currently recommended by the CDC, including influenza (flu), pneumococcal (pneumonia), zoster (shingles), Tdap (tetanus-diptheria-pertussis), MMR (Measles, Mumps and Rubella), Hepatitis A & B, and meningitis, to name but a few. Vaccines you may need as an adult are also determined by factors such as:

<table>
<thead>
<tr>
<th>Age</th>
<th>Lifestyle</th>
<th>Health Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Employment</td>
<td>International Travel</td>
<td>History of Previous Vaccines</td>
</tr>
</tbody>
</table>

**Some Tips:**

- Take the short CDC quiz at the link below to see which vaccines you may need & create a customized printout to take with you to your next medical appointment: [http://www2.cdc.gov/nip/adultimmsched/](http://www2.cdc.gov/nip/adultimmsched/)
- Talk to your healthcare provider to determine which vaccines are right for you.
- Maintain a vaccination record of the vaccines you receive and the date of administration to ensure you maintain the best possible protection against vaccine-preventable diseases.
- Call the ACHD at 573-581-1332 for any immunization questions or simply visit us to obtain needed vaccinations.

**DON’T WAIT VACCINATE!**
In the U.S., approximately 1 million people get shingles every year, and 1/3 of people get shingles during their lifetime. Your risk of shingles and post-herpetic neuralgia (PHN) increases as you age.

What is Shingles?

Shingles, also known as zoster or herpes zoster, is a painful skin rash caused by the varicella zoster virus, the same virus that caused chickenpox. If you’ve had chickenpox, you are at risk of getting shingles. Your adult risk:

- 1 out of 3 people 60 years & older will get shingles.
- 1 out of 6 people older than 60 who get shingles will have severe pain that lasts for months or even years.
- The most common complication is severe pain at the location of the rash, As people get older, the pain is more likely to be long-term and severe.
- Shingles may also lead to serious complications involving the eye. In rare instances, shingles can lead to blindness, pneumonia, hearing problems, brain inflammation (encephalitis), or death.

Who Should Get Shingles Vaccine?

The CDC recommends that people 60 years & older get the vaccine to prevent shingles and PHN. Zostavax is administered as a single injection vaccine and is given at the Audrain County Health Department & other healthcare settings. People should get the vaccine whether or not they recall having had chickenpox. More than 99% of Americans aged 40 and older have had chickenpox, even if they don’t remember getting the disease.

If you already have had shingles, you can still receive the vaccine to help prevent future occurrences of the disease. The shingles vaccine is approved by the FDA for people 50 years and older. However, the CDC does not have a recommendation for routine use of shingles vaccine in people 50 - 59 years old. Moreover, protection from the vaccine lasts about 5 years, so adults vaccinated before 60 years old might not be protected later in life when the risk for shingles and it complication are greatest. The decision on when to get vaccinated should be made with your healthcare provider.

Who Should Not Get Shingles Vaccines?

Individuals who should not get the shingles vaccine include those who have:

- Had a life-threatening or severe allergic reaction to gelatin, the antibiotic neomycin, or any other component of the shingles vaccine.
- A weakened immune system because of HIV/AIDS or other diseases.
- Treatments that affect the immune system.
- Cancer affecting the bone marrow or lymphatic system.
- Women who are or might be pregnant.
- A moderate or severe acute illness, or those with a temperature of 101.3° F or higher. Instead, they should wait until they recover before getting the vaccine.

Feel free to call the ACHD for insurance and Medicare coverage information at 573-581-1332.
### 2016 Recommended Immunizations For Adults: By Age

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Vaccines Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 - 21 years</td>
<td>H. influenzae type b, Hepatitis B, Hepatitis A, Chickenpox, HPV, MMR, Polio, PCV13, PPSV23, Shingles, Zoster, Tetanus, Influenza, Pneumococcal</td>
</tr>
<tr>
<td>22 - 26 years</td>
<td>Same as 19 - 21 years</td>
</tr>
<tr>
<td>27 - 49 years</td>
<td>Same as 19 - 21 years</td>
</tr>
<tr>
<td>50 - 64 years</td>
<td>Same as 19 - 21 years</td>
</tr>
<tr>
<td>65+ years</td>
<td>Same as 19 - 21 years</td>
</tr>
</tbody>
</table>

*Talk to your healthcare professional about these vaccines.*
### 2016 Recommended Immunizations for Adults

<table>
<thead>
<tr>
<th>Condition</th>
<th>Hepatitis A</th>
<th>Hepatitis B</th>
<th>Influenza</th>
<th>Meningococcal</th>
<th>Mumps, Measles, and Rubella</th>
<th>Polio</th>
<th>Pneumococcal</th>
<th>Shingles</th>
<th>Typhoid Vaccine</th>
<th>Varicella</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

- **Hepatitis A**: Required for adults born before 1956 who have not been vaccinated.
- **Hepatitis B**: Recommended for all adults born after 1964 who have not been vaccinated.
- **Influenza**: Recommended annually for all adults.
- **Meningococcal**: Recommended for adults who live in institutions or have certain medical conditions.
- **Mumps, Measles, and Rubella**: Recommended for adults who have not been vaccinated.
- **Polio**: Recommended for adults who were born before 1970.
- **Pneumococcal**: Recommended for adults over 65 years old, and those with certain medical conditions.
- **Shingles**: Recommended for adults over 50 years old.
- **Typhoid Vaccine**: Recommended for adults who travel to areas where typhoid fever is common.
- **Varicella**: Recommended for adults who were not vaccinated as children.

#### Additional Information

- **Chronic Liver Disease**: Chronic liver disease or cirrhosis may increase the risk of certain vaccines. Talk to your healthcare provider about these vaccines.
- **Chronic Alcoholism**: Chronic alcoholism may reduce the effectiveness of certain vaccines. Talk to your healthcare provider about these vaccines.
- **Chronic Kidney Disease**: Chronic kidney disease (not dialysis) or dialysis recipients may require additional doses of some vaccines. Talk to your healthcare provider about these vaccines.
- **HIV/AIDS**: People with HIV/AIDS may require additional doses of some vaccines. Talk to your healthcare provider about these vaccines.
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#### Pregnancy

Talk to your healthcare provider about these vaccines during pregnancy.

#### Additional Information

If you have any questions or concerns about your adult immunization status, please consult with your healthcare provider.
What is influenza (most commonly called flu)? Flu is a respiratory illness caused by a virus. It can be mild to severe and in some can even cause death. Flu is spread through the droplets in the air when a person who has the flu coughs, sneezes or talks. Signs and symptoms of the flu are:

- Fever or chills, not everyone will have fever
- Runny or stuffy nose
- Muscle or body aches
- Headaches
- Fatigue
- Some may have vomiting or diarrhea but it is more common in children

Symptoms typically begin 1 - 4 days after being exposed to the flu virus. You may be able to spread the flu to others before you even begin to feel sick. Flu can be spread 1 day before symptoms develop and up to 5 - 7 days after becoming sick.

Anyone can get sick with the flu but there are certain groups who are at higher risk for complications. People over the age of 65, people with certain chronic health conditions, pregnant women and young children are at the highest risk of complications.

The best prevention to the flu is for everyone 6 months of age and older to receive a flu vaccination every year. Simple steps that can be taken to prevent the spread of flu are to stay away from people who are sick, covering coughs and sneezes and frequent handwashing. Flu vaccines can be given as soon as the vaccine is available, typically in September or October. A change in the 2016 - 2017 flu season is that the Flu Mist is no longer available. Audrain County Health Department (ACHD) provides flu vaccine at the office as soon as the vaccine is made available. For any questions, please call ACHD at 573-581-1332.

Pneumonia is an infection that inflames the air sacs in one or both lungs. A variety of organisms, including bacteria, viruses and fungi, can cause pneumonia.

Anyone can get pneumococcal disease, but some people are at higher risk for disease than others. Being a certain age or having some medical conditions can put you at increased risk for pneumococcal disease. Children at increased risk for pneumococcal disease includes those:

- Younger than 2 years old
- In group child care
- Who have certain illnesses (sickle cell disease, HIV infection, or chronic heart or lung condition).
- With cochlear implants or cerebrospinal fluid (CFS) leaks (escape of the fluid that surrounds the brain and spinal cord)
Adults 65 years or older are at increased risk for pneumococcal disease.

Some adults 19 through 64 years old are also at increased risk for pneumococcal disease:

- With chronic illnesses (lung, heart, liver, or kidney disease, asthma, diabetes, or alcoholism)
- With conditions that weaken the immune system (HIV/AIDS, cancer, or damaged/absent spleen)
- With cochlear implants or cerebrospinal fluid (CSF) leaks (escape of the fluid that surrounds the brain and spinal cord)
- Who smoke cigarettes

Pneumococcal bacteria spread from person-to-person by direct contact with respiratory secretions, like saliva or mucus.

Symptoms of pneumonia include:

- Fever and chills
- Cough
- Rapid breathing or difficulty breathing
- Chest pain

The best way to prevent pneumonia is to get vaccinated. There are two types of pneumococcal vaccine. Prevnar 13 is recommended for all children at 2,4,6, and 12 through 15 months old. PCV 13 is also recommended for adults 19 years or older with certain medical conditions and in all adults 65 or older. Pneumovax 23 is recommended for adults 19 through 64 years old who smoke cigarettes or who have asthma. For adults over the age of 65, both of the above vaccines are needed to complete protection.

Audrain County Health Department (ACDH) offers both vaccines.

For any questions please call the ACHD at 573-581-1332.
2016 Recommended Immunizations for Children From Birth Through 6 Years Old
Talk to your child's doctor or nurse about the vaccines recommended for their age.
The Mission of ACHD:
To protect and promote the public health and community well being of the residents of Audrain County.

The Audrain County Health Department is for everyone in our community.
Office hours: Monday through Friday, 8 am - 4 pm
Our services include: Blood Pressure Screening, WIC, Foot Clinic, Immunizations, STI, Pregnancy, and TB Skin testing, Birth and Death Certificates, Environmental Public Health Services, and much more.

ACHD’s On the Move...

THE AUDRAIN COUNTY HEALTH DEPARTMENT IS NOW OFFERING FREE MAMMOGRAMS

The Missouri Baptist Medical Center and Susan G. Komen Foundation’s Mobile Mammography Unit will be at the:

Audrain County Health Department
1130 S. Elmwood Drive, Mexico, MO

On Friday, November 4th

Appointments available from 9 a.m. to 3 p.m.

We offer FREE mammogram screenings for women age 40 years or older who do not have insurance or have a high deductible. We accept most insurance plans if you do have coverage.

Call 800-870-5731 or 314-996-5170 (option 2) to schedule your appointment.