Vaccination and Immunization

Health Prevention and Education Unit

Prepared by Licensed Health Educators

Objectives

- Discuss myths and realities about vaccination.
- Learn about the recommended vaccines for children and adults.
- Identify the health benefits of receiving vaccines.

Definitions

Immunization is the process by which a person becomes immune or resistant to an infectious disease, usually through vaccination.

Vaccines are medications made from treated and inactivated infectious agents to eliminate their ability to cause disease.

Vaccination is one way to improve the immune system's response and prevent serious and life-threatening diseases.

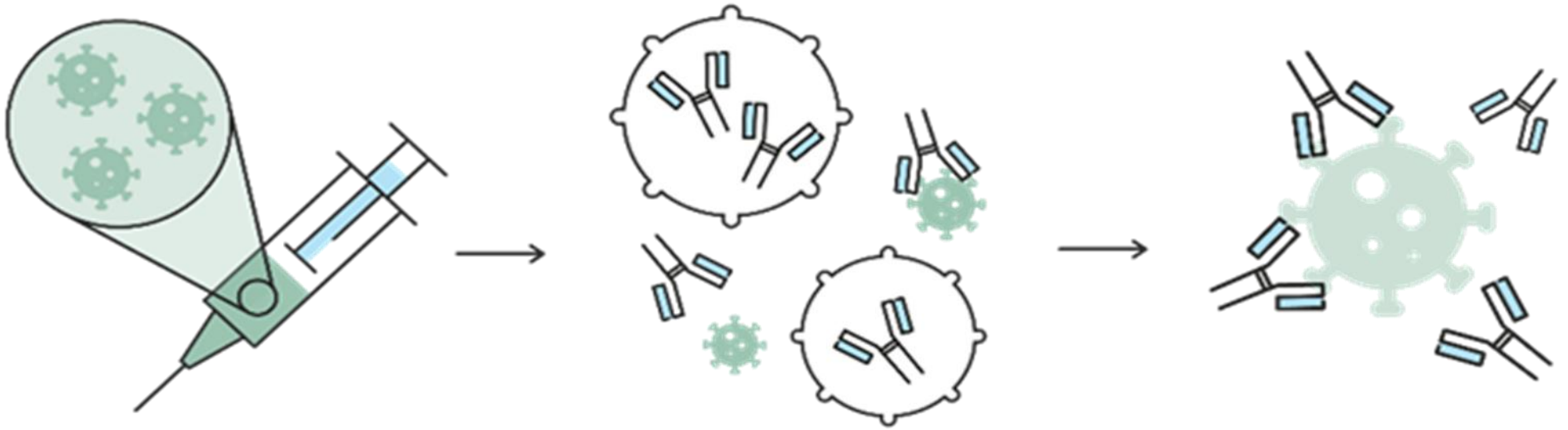
Importance of vaccination

It allows us to stay healthy.

It prevents life-threatening illnesses.

It protects our loved ones.

How do vaccines work?



Weak or dead bacteria are introduced into the patient, often by injection.

White blood cells are activated to produce antibodies that fight the disease.

If the microorganism re-infects the person, the antibodies neutralize the invading cells.

What are the recommended vaccines?

Influenza Vaccine

POPULATION AT RISK

Children under 2 years old

Chronic illnesses

People 65 years of age or older

Pregnancy

INFORMATION

Anyone 6 months and older can receive the vaccine.

It is recommended to get vaccinated every year to provide immune protection.

Peak season: December to May

Meningococcal Vaccine

It protects against various diseases caused by meningococcal bacteria.

A first dose is indicated between ages 11 and 12, and a booster at age 16.

Any adolescent who was vaccinated between ages 13 and 15 will need a booster at age 18.

Meningococcal Vaccines

Meningococcal conjugate vaccine (MenACWY)

- It protects against four types of meningococcal bacteria (types A, C, W, and Y).
- The vaccine is recommended at age 11 or 12, with a booster dose at age 16.
- Adolescents who receive their first dose after age 16 do not need a booster dose.

Meningococcal type B vaccine (MenB)

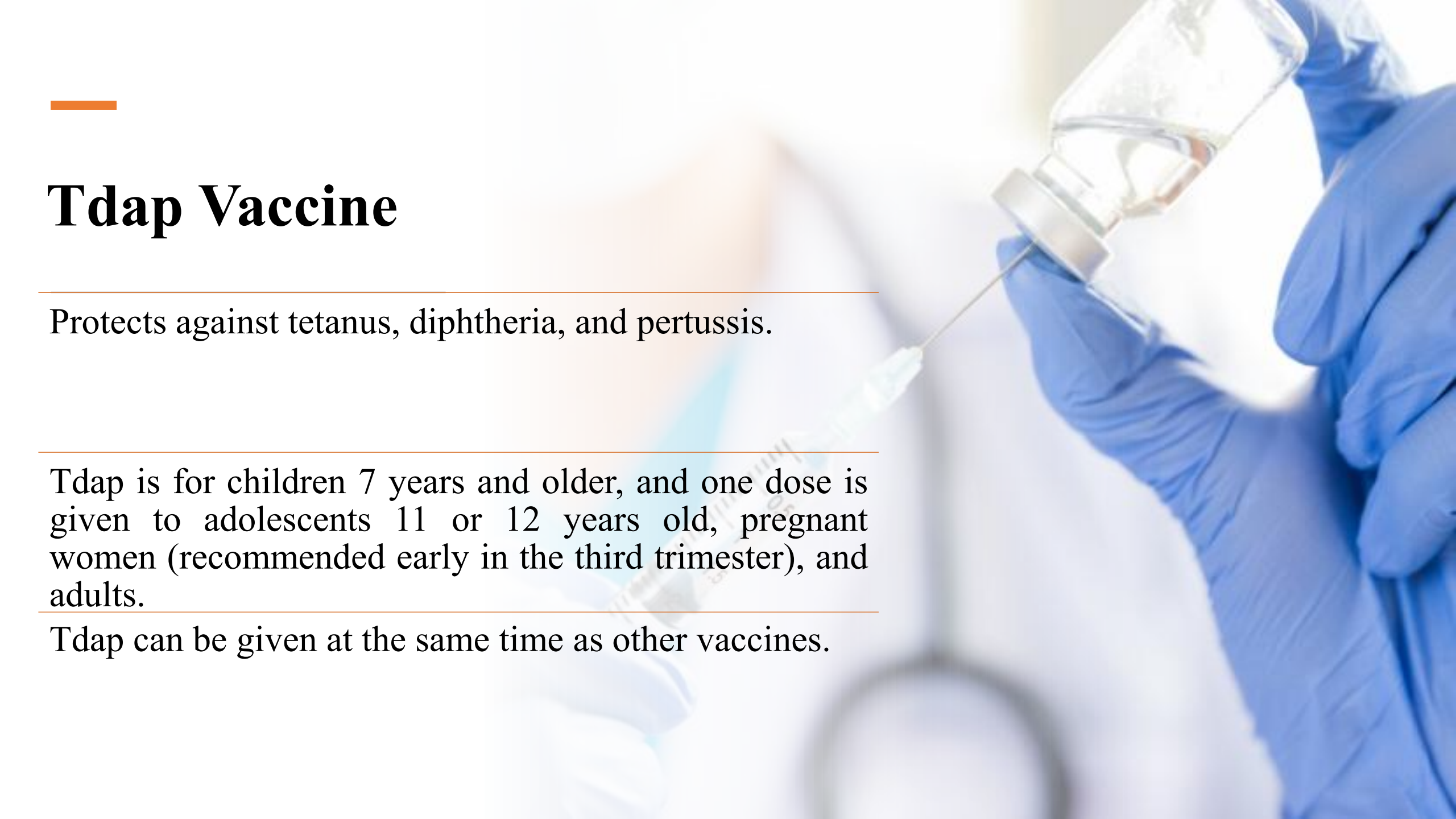
- It protects against the fifth type of meningococcal bacteria (type B).
- It is recommended for children 10 years of age and older with risk factors; they will need 2 to 3 doses depending on the brand.
- This vaccine is new and is not yet recommended as a routine vaccination.

Tdap Vaccine

Protects against tetanus, diphtheria, and pertussis.

Tdap is for children 7 years and older, and one dose is given to adolescents 11 or 12 years old, pregnant women (recommended early in the third trimester), and adults.

Tdap can be given at the same time as other vaccines.



Chickenpox Vaccine

2

Two doses are very effective in preventing the disease.

First dose: between 12 and 15 months

Second dose: between 4 and 6 years

HPV Vaccine

It is recommended for children between 9 and 14 years of age.

It is also recommended for people up to 26 years of age who have not received the vaccine or have not completed their doses.

People between 27 and 45 years of age may be candidates for the vaccine; you should consult with your doctor.

It is administered as a 2-dose series for children between 9 and 14 years of age:

First dose: now

Second dose: 6 to 12 months after the first dose.

It is administered in a 3-dose series for people aged 15 to 26 years and people with weakened immune systems:

First dose: now

Second dose: 1 or 2 months after the first dose

Third dose: 6 months after the first dose.

*Pregnant women should not receive this vaccine.

COVID-19 Vaccine

- People 6 months and older should receive an updated 2024–2025 COVID-19 vaccine, including pregnant women or those planning to become pregnant.
- People 5 years and older should receive one dose of the vaccine.
- People 65 years and older need two doses, spaced 2 to 6 months apart to be up to date.
- People with compromised immune systems may receive additional doses of the vaccine.
- COVID-19 vaccines do not contain a live virus, cannot cause COVID-19, do not affect your genes (DNA), and do not interfere with pregnancy or render you infertile.

Hepatitis A and B Vaccine

Hepatitis A	Hepatitis B
• It protects against contracting hepatitis A, a potentially serious disease. • It is very safe and effective in preventing this disease. • Furthermore, it is recommended for children 12 to 23 months old, children and adolescents 2 to 18 years old who have not received the vaccine, and people at increased risk of contracting the disease.	• It prevents liver disease and liver cancer caused by hepatitis B. • It is very safe and effective in preventing this disease. • Likewise, it is recommended for infants, children, and adolescents under 19 years of age who have not been vaccinated; adults aged 19 to 59; and adults 60 years of age and older with risk factors for the disease.

Polio Vaccination

Polio

It is important to get vaccinated because it is a potentially serious disease.

- Children should receive 4 doses in total:
  - 1 dose at 2 months
  - 2 doses at 4 months
  - 3 doses between 6 and 18 months
  - 4 doses between 4 and 6 years
- If an adult was not vaccinated as a child, they should receive:
  - 1 dose at any time
  - 2 doses between 1 and 2 months
  - 3 doses between 6 and 12 months after the 2nd dose

Measles, Mumps, and Rubella Vaccination

MMR or triple viral

- Children need two doses of the MMR vaccine: one between ages 12 and 15 months and two between ages 4 and 6 years.
- Older children, adolescents, and adults need one to two doses of the vaccine if they don't have evidence of immunity.

Pneumococcal Conjugate Vaccine

- Currently, there are four types of pneumococcal conjugate vaccines (PCV13, PCV15, PCV20, and PCV21).
- PCV15 and PCV20 vaccines: Infants and young children require four doses at ages 2, 4, 6, and 12–15 months.
- Children 24–59 months of age can receive the vaccine if they have not received the recommended doses.
- Children and adolescents 6–18 years of age with certain medical conditions may require a vaccine if they have not yet received the recommended doses of PCV13, PCV15, or PCV20.

Pneumococcal Conjugate Vaccine

- PCV15, PCV20, and PCV21 Vaccines:
- Adults aged 19–50 years with certain medical conditions or other risk factors who have not yet received the vaccine should receive any of the following: 1 single dose of PCV15 followed by 1 dose of PPSV23 vaccine, 1 single dose of PCV21, or 1 single dose of PCV21.
- Adults aged 50 years and older who have not yet received the vaccine should receive any of the following: 1 single dose of PCV15 followed by 1 dose of PPSV23, 1 single dose of PCV20, or 1 single dose of PCV21.

Respiratory Syncytial Virus (RSV) Vaccine

- A single dose is recommended for pregnant women from week 32 through week 36 of pregnancy. This helps prevent RSV disease in infants younger than 6 months of age.
- The vaccine is recommended for administration between September and January.
- In addition, an additional dose of the vaccine is indicated for people 75 years of age and older and for adults 60 to 74 years of age who are at higher risk for severe illness from RSV.
- The RSV vaccine can be administered at the same time as other vaccines.

Dengue and Hib Vaccine

Dengue

- The vaccine is recommended for children aged 9 to 16 years with prior dengue virus infection, confirmed by laboratory testing, and living in areas where dengue is common.
- Three doses are required: one dose is administered after confirmation of infection, the second dose is administered 6 months after the first dose, and the third dose is administered after the second dose.

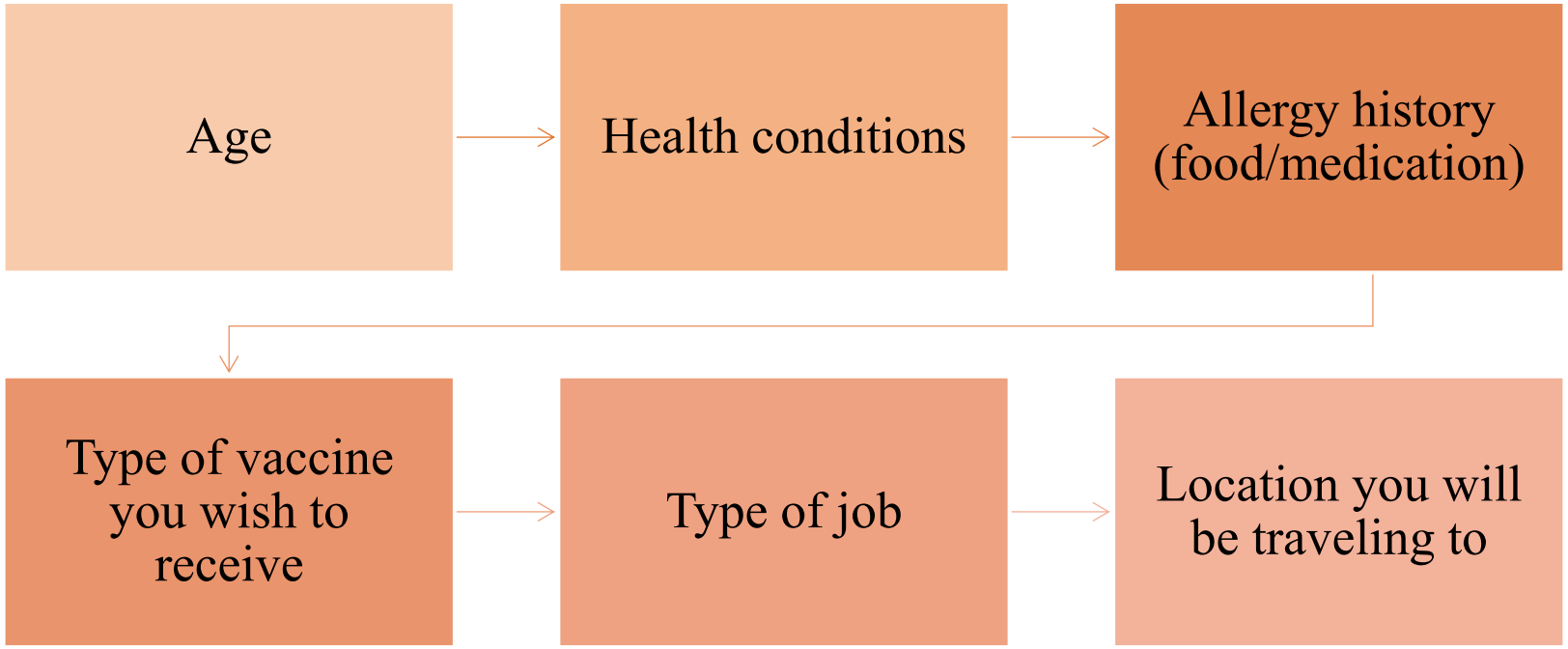
Haemophilus influenzae type b (Hib)

- The Hib vaccine protects young children from the bacteria that causes meningitis.
- Children should receive this vaccine at the following ages: 2 months, 4 months, 6 months, and 12–15 months (as a booster dose).
- Children 15 months to 5 years of age receiving the vaccine for the first time generally only need one dose.
- Children 12 months to 5 years of age may require more doses if they have a weakened immune system.

Rotavirus Vaccination

- Currently, there are two types of vaccines: RotaTeq® (RV5) and Rotarix® (RV1).
- The baby should receive one of the two vaccines:
- The RotaTeq® (RV5) vaccine is administered in 3 doses: the first dose at 2 months, the second dose at 4 months, and the third dose at 6 months.
- The Rotarix® (RV1) vaccine is administered in 2 doses: the first dose at 2 months and the second dose at 4 months.

What factors should be considered when getting vaccinated?



Possible side effects

Pain, redness, and swelling. Also, discomfort at the vaccination site.

Mild fever, tiredness, headache, or chills.

Experiencing some of the most common side effects is a sign that your body is beginning to develop immunity (protection) against a disease.

Vaccines are safe!

They reduce the risk of exposure to certain preventable diseases.

They are developed according to the highest quality standards, requiring numerous studies and analyses before distribution.

However, like any medical intervention or medication treatment, people may have different reactions to vaccines.

Vaccines are safe!

Anyone who receives a vaccine should be informed about its risks and benefits.

There are increased health risks if you contract the disease before you have received the vaccine.

Consult your doctor, pharmacist, or healthcare provider to address any questions or concerns.

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Social and Emotional Aspect

For recommendations, tools, and resources on how you and your family can address the emotional and physical concerns that arise during and after your medical treatment, please visit your primary care physician or call the following phone numbers.

Available Services Line

Medical Advice Line
24 hours a day / 7 days a week
1-844-347-7801
TTY/TDD: 1-844-347-7804

Customer Service
1-844-347-7800
TTY/TDD: 1-844-347-7805

APS Health
787-641-9133

Questions?
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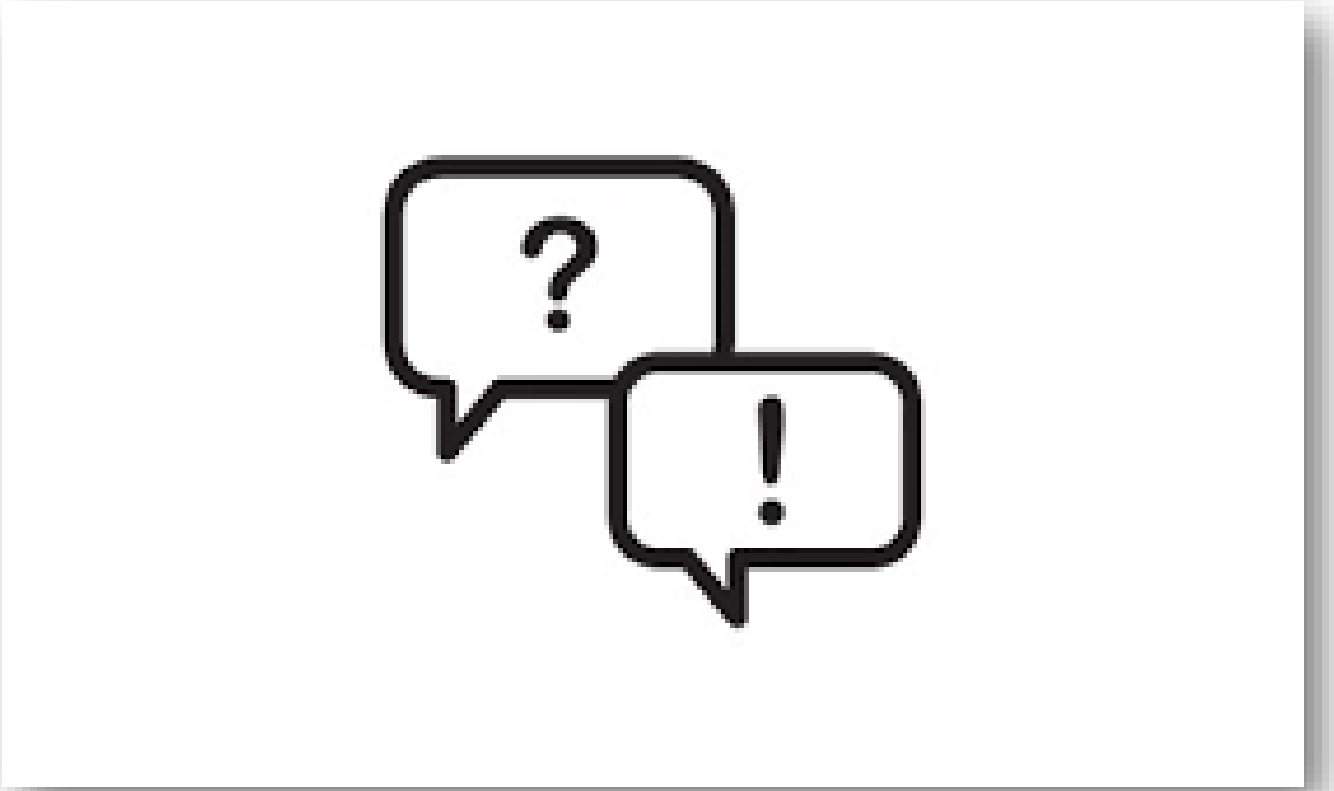
Comments!



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