

Vaccinations:

- A _____ given to a person or animal to _____ against a specific disease.
- _____ or taken _____
- Usually for _____ and _____
- Causes an _____ – so that the body _____ the pathogen
- You don't get _____ when _____ to the pathogen



Types:

Type of Vaccine	How it works	Examples
Live, attenuated	Live, _____ microbes Strong, _____ immunity Only need _____	Measles Mumps Chickenpox Yellow Fever
Inactivated	Microbes have been _____ _____ response Need a _____ shot periodically	Hepatitis A Rabies Whooping Cough
Subunit	Only includes a _____ of the microbe Requires _____ doses	Hepatitis B Flu
Toxoid	_____ from certain bacteria, they are _____ in the lab Need a _____ shot	Diphtheria Tetanus

Why get vaccinated?

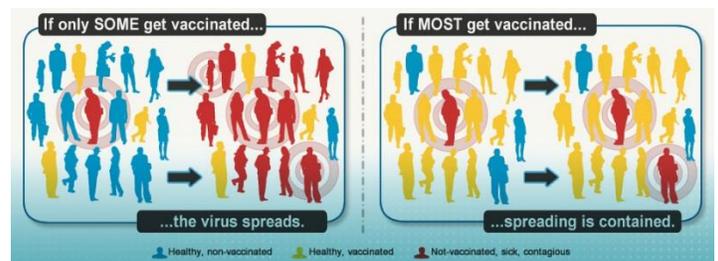
- Protected from _____ diseases
- Protected from diseases that cause _____ such as _____, muscle paralysis, heart damage and _____
- Helps to stop the _____ of disease and keeps an _____ from turning into an epidemic or pandemic
- Some diseases can be _____ – Small Pox was declared eradicated in _____



Effectiveness of certain vaccines

Disease	Number of reported cases, 1980	Number of reported cases, 2014	Percent decrease in cases
Diphtheria	97 774	7321	92.5
Measles	4 211 431	267 582	93.6
Polio	57 795	371	99.4
Tetanus	114 248	11 392	90.0
Whooping cough	1 982 384	220 504	88.9

Check out this animation: <http://bit.ly/whyvaccinate>



Antibiotics

What do you think an antibiotic is?

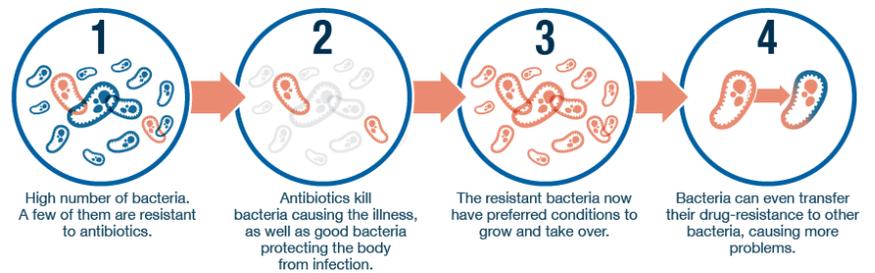
A bacteria is a type of _____. Bacteria can be found everywhere. Are all bacteria harmful to us?

The combination of _____ and _____ have saved millions of lives. Some examples of antibiotics are:

_____.

How are bacteria that are immune to antibiotics created? Look at the diagram and describe the process in your own words.

How does antibiotic resistance occur?



What are superbugs?

Note: Special antibiotics “Super-antibiotics” are not used very often and their use is strictly controlled to make sure that bacteria do not develop resistance to them. These antibiotics are only used in special cases with patients who are infected with superbugs that are resistant to most other antibiotics.