

# Influenza: Prevention and Control

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Disease Control and Prevention

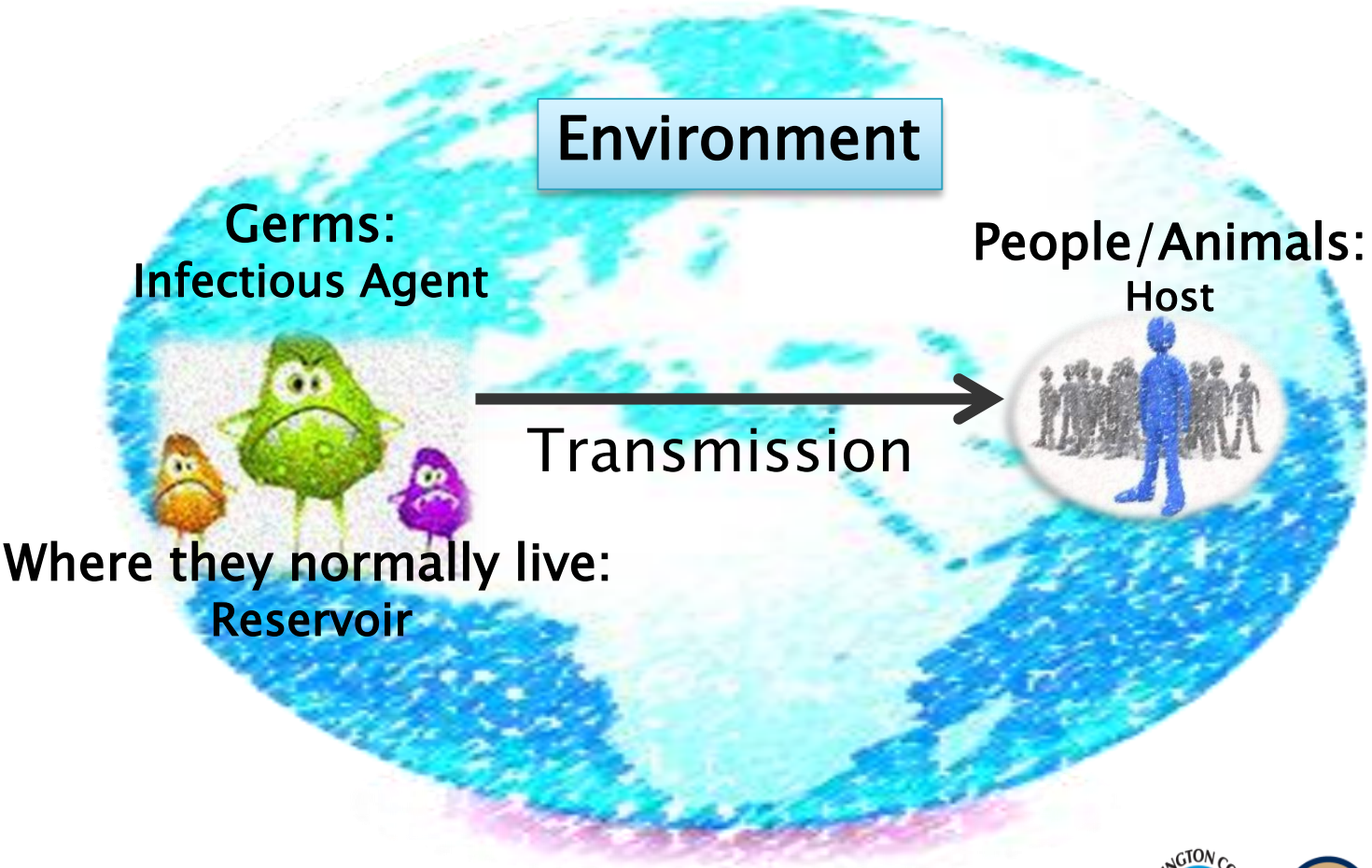
*Healthy People, Thriving Communities*



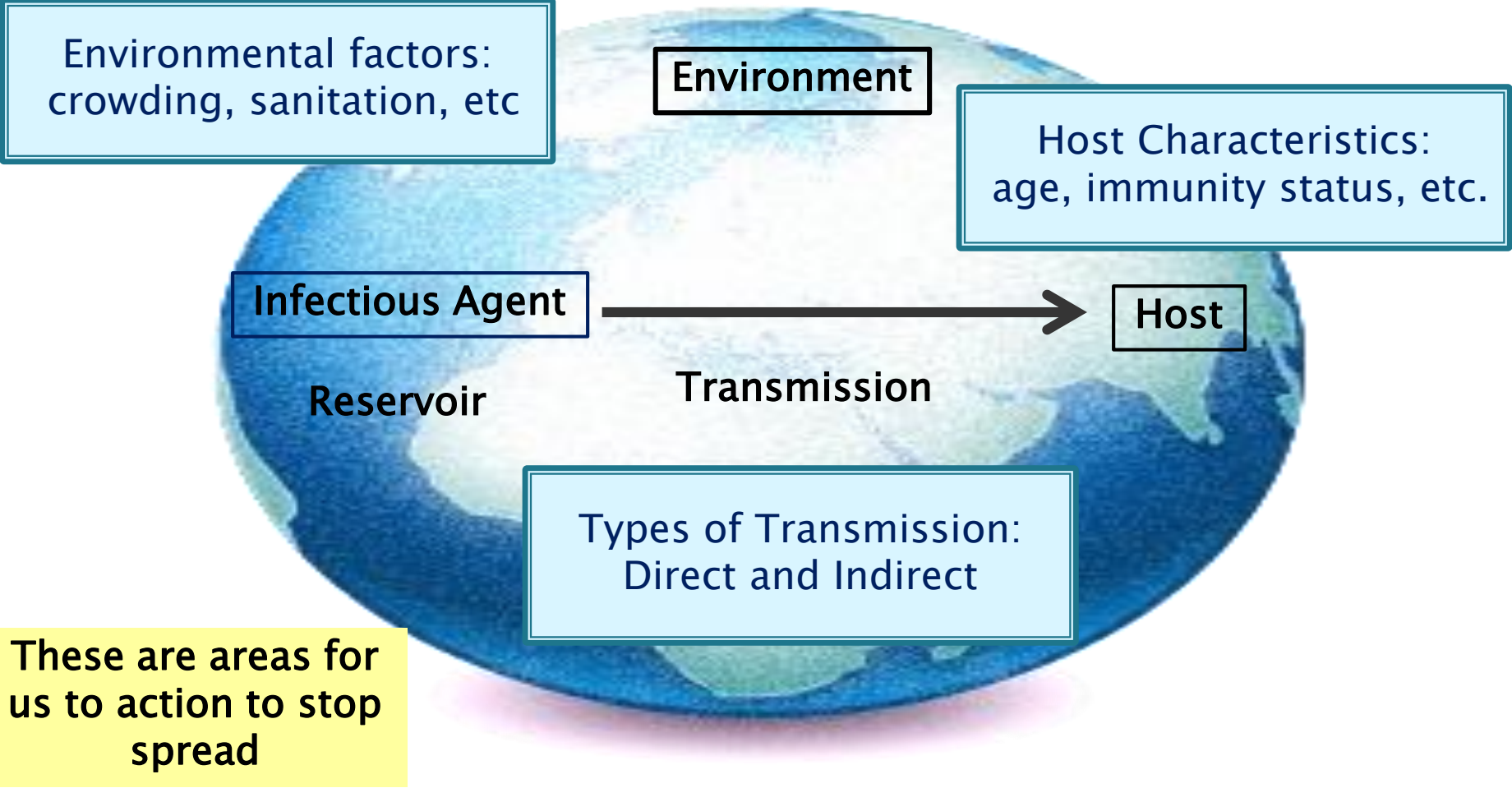
**Public Health**  
Prevent. Promote. Protect.



# Spread of Disease



# Spread of Disease



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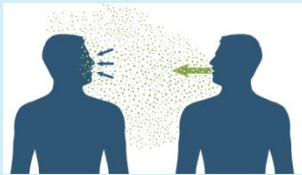
# Types of Transmission

## ▶ Direct

- Person to person



- Droplet



- Vertical

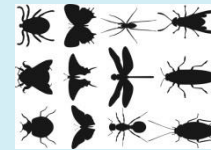


## ▶ Indirect

- Airborne



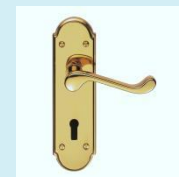
- Vector-borne



- Vehicle-borne



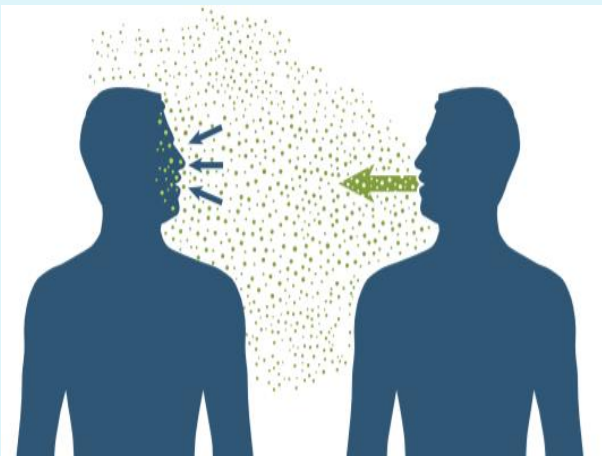
- Fomites



# Types of Transmission: Droplet vs. Airborne

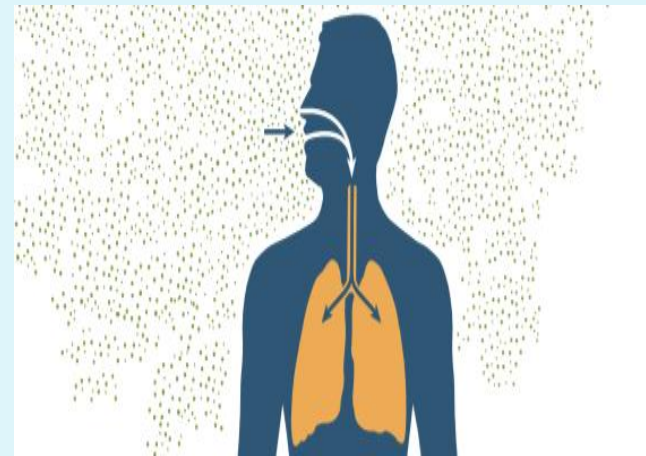
## ▶ Droplet

- Water heavy particles from nose or throat
- Fall to ground within ~6 feet
- Mostly respiratory infection
- i.e. Influenza, Pertussis, Mumps

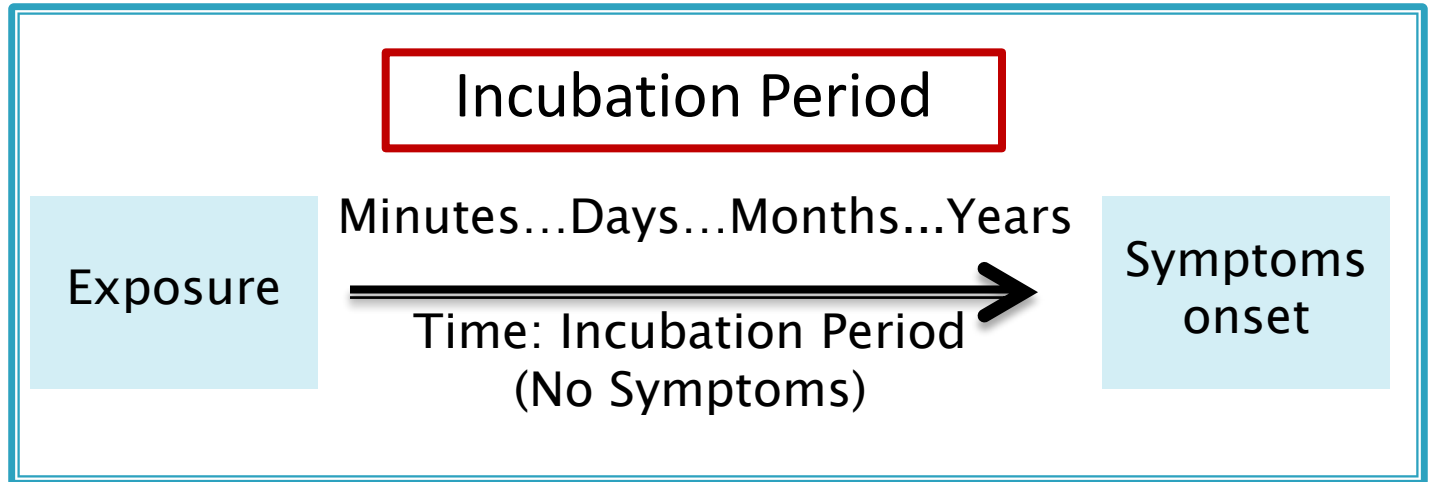


## ▶ Airborne

- Particles <5nanometer in size
- Remains suspended for long periods. Can act as gas.
- Evaporate by leaving droplet nuclei
- i.e. Tuberculosis(TB), measles, chickenpox



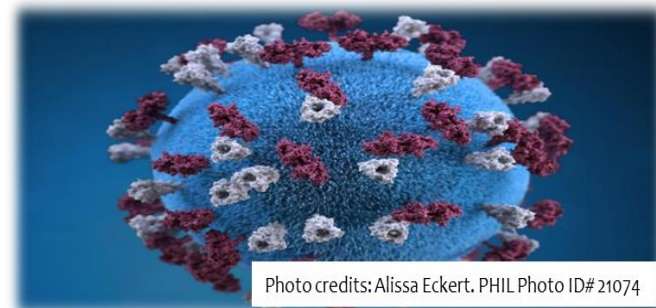
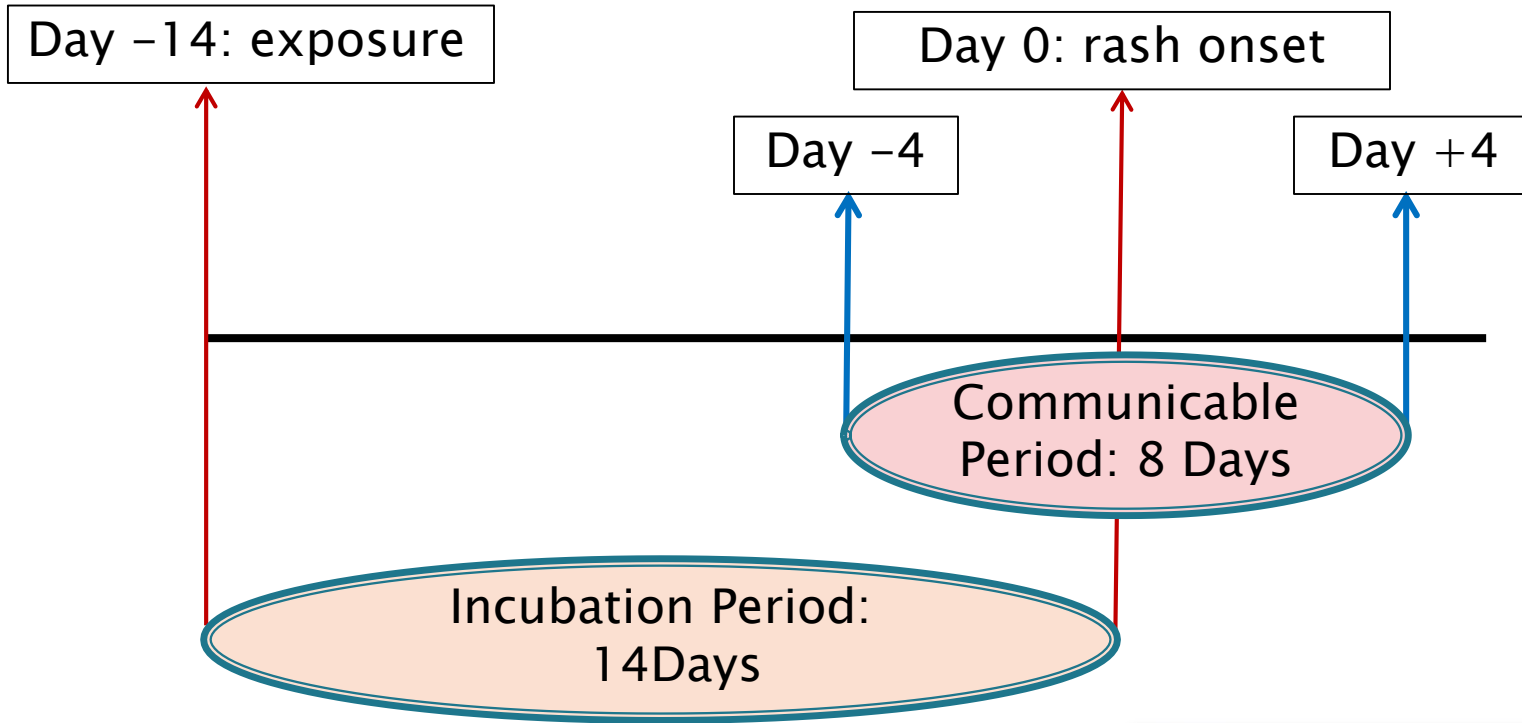
# Spread of Disease



## Communicable Period



# Example: Measles Time Line



# The Pathogen

- ▶ Influenza (Flu)
  - Pathogen: Virus
  - Type of transmission: Droplet, person to person
  - Communicable period: 1 day before and up to 5-7 days after symptoms onset
  - Incubation period: 1-4 days

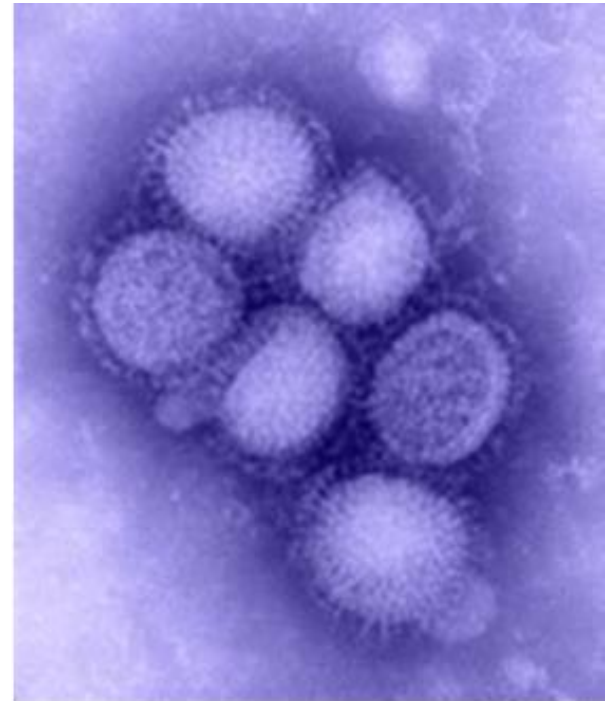


Photo credits: CDC  
Influenza lab





# Signs & Symptoms

## How do you know if you have the flu?

Signs of the flu can include:



Fiebre

Fever



Tos

Cough



Dolor de garganta

Sore throat



Mucosidad nasal  
o nariz tapada

Runny or stuffy nose



Sentirse débil o más cansado de lo habitual

Feeling weak or more tired than usual



Dolor de cabeza

Headache



Escalofríos

Chills



Dolores corporales

Body aches

Two less common signs of the flu include:

Entre los dos síntomas menos comunes de la influenza se incluyen:



Vómitos

Vomiting



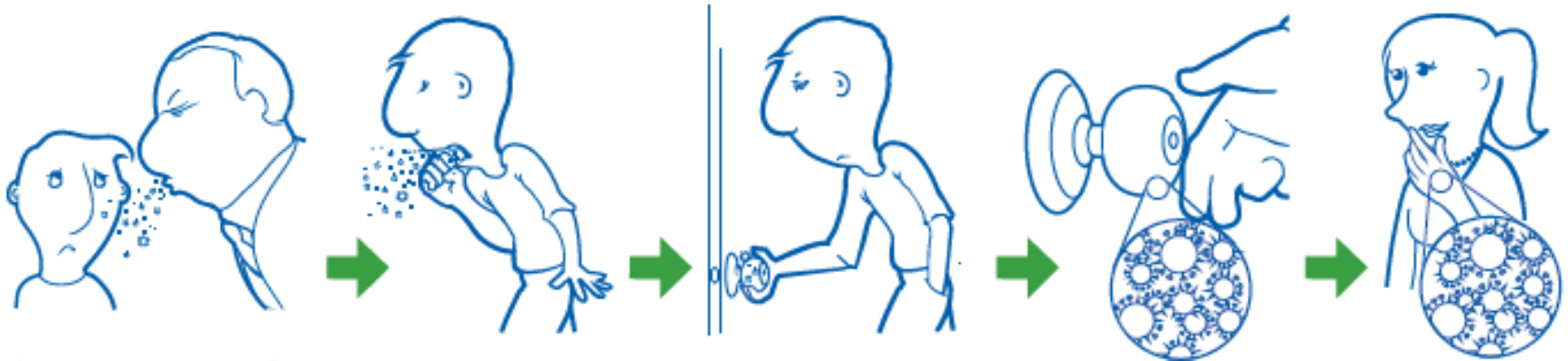
Diarrhea

Diarrea

# Spread of infection

Spread of the virus:

Diseminación del virus:



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# Prevention and Control



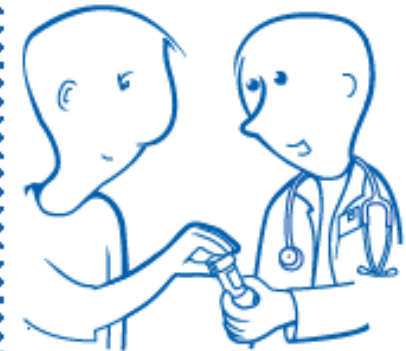
**Vaccination**



**Stay away from people who are sick.**



**Wash your hands often with soap and warm water. If soap and water are not available, use an alcohol-based hand rub.**



**Use medication the way your doctor recommends it.**

**Vacúnese**

**Manténgase alejado de las personas enfermas.**

**Lávese las manos frecuentemente con agua y jabón. Si no dispone de agua y jabón, utilice un desinfectante para manos a base de alcohol.**

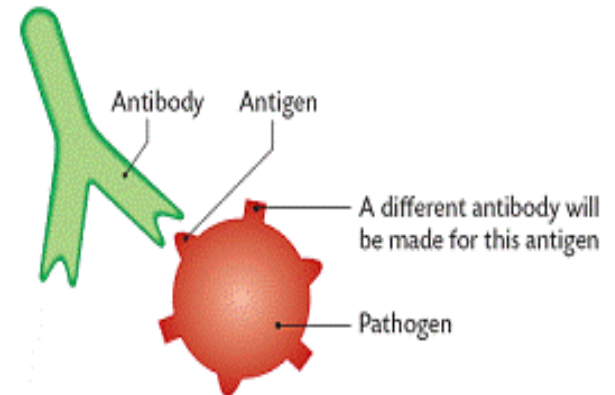
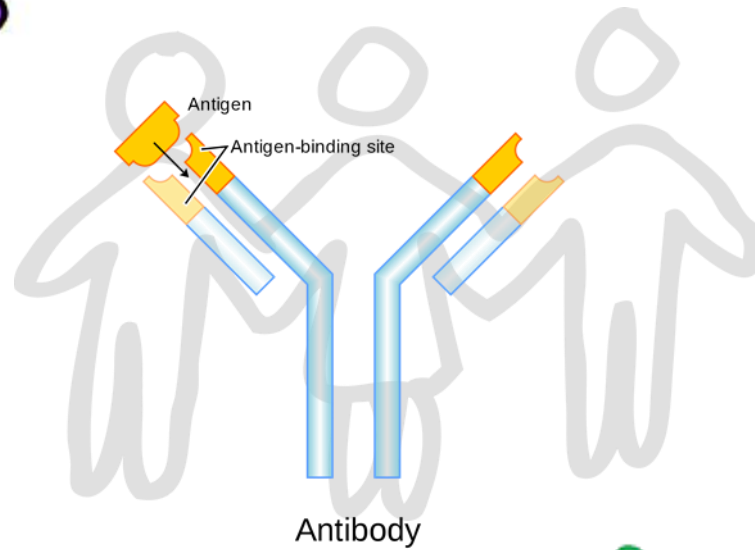
**Tome los medicamentos tal como lo recomiende su médico.**



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# How do flu vaccines work?



# Myths and Misperceptions

**MYTH** "The flu isn't a serious disease."

**FACTS** Influenza (flu) is a serious disease of the nose, throat, and lungs, and it can lead to pneumonia. Each year about 200,000 people in the U.S. are hospitalized and about 36,000 people die because of the flu. Most who die are 65 years and older. But small children less than 2 years old are as likely as those over 65 to have to go to the hospital because of the flu.

Myth: I should wait to get vaccinated so I'm covered until the end of the season

Fact: Get the flu vaccine as soon as possible. It takes 2 weeks for antibodies to develop

**MYTH** "The flu shot does not work."

**FACTS** Most of the time the flu shot will prevent the flu. In scientific studies, the effectiveness of the flu shot has ranged from 70% to 90% when there is a good match between circulating viruses and those in the vaccine. **Getting the vaccine is your best protection against this disease.**

Myth: The flu vaccine can give me the flu

Fact: Flu viruses used in flu shots are inactivated, so they cannot cause infection

**FACTS** The flu shot cannot cause the flu. Some people get a little soreness or redness where they get the shot. It goes away in a day or two. Serious problems from the flu shot are very rare.

**MYTH** "The side effects are worse than the flu."

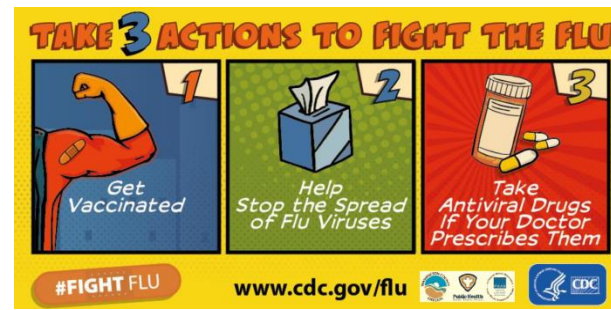
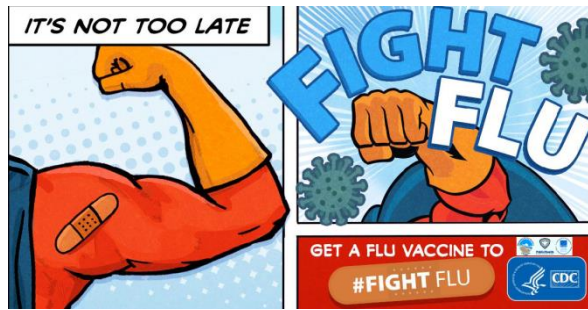
**FACTS** The worst side effect you're likely to get from a shot is a sore arm. The nasal mist flu vaccine might cause nasal congestion, runny nose, sore throat and cough. The risk of a severe allergic reaction is less than 1 in 4 million.

Myth: The flu shot will protect me from every type of flu virus

Fact: The flu shot is designed yearly to protect against the highest risk/actively circulating strains of influenza

**MYTH** "You must get the flu vaccine before December."

**FACTS** Flu vaccine can be given before or during the flu season. The best time to get vaccinated is October or November. **But you can get vaccinated in December or later.**

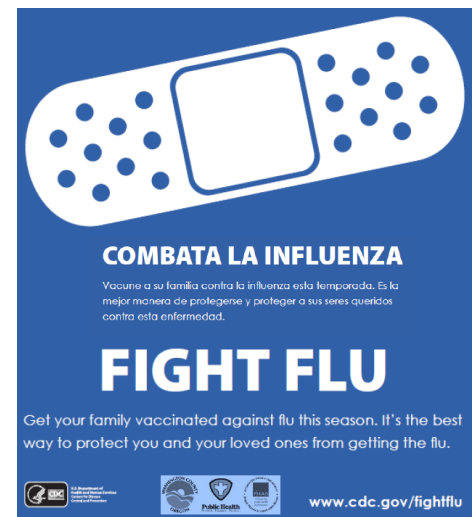


# What can I do to stop the flu?

## Get Vaccinated, Stop the Spread

# How can I stop the flu in the facility?

Participate in Flu Campaign  
Encourage Vaccination  
Stop the Spread



# Questions

