How many American get sick with the flu each year?
- 5% to 20% of Americans get the flu each year.
- More than 200,000 Americans annually are hospitalized from flu complications.
- About 36,000 Americans die annually from the flu.

What causes the flu?
- The flu is caused by an infection by influenza viruses. It can cause mild to severe illness, and in rare instances it can lead to death.

What are the symptoms of the flu?
- The flu is distinguished by the sudden onset of body aches along with a high fever, and respiratory symptoms. Symptoms include:
  - Fever (usually high)
  - Headache
  - Extreme tiredness
  - Dry cough
  - Sore throat
  - Runny or stuffy nose
  - Muscle aches
  - Stomach symptoms, such as nausea, vomiting, and diarrhea, can also occur but are more common in children than adults

How does the flu spread?
- Influenza viruses spread most commonly from person to person through either coughing or sneezing by a person who has the flu.
- It is also possible to get the flu by touching a surface contaminated with the flu viruses and then touching your mouth or nose.

When is a person contagious?
- Most healthy people with the flu will be contagious starting 1 day before they are symptomatic, and continue to be contagious for up to 5 days after symptoms began.

How can I prevent the flu?
- The single most effective way to prevent the flu is to get the flu vaccine. There are two different types of flu vaccines available each year:
  - The “flu shot” is an inactivated vaccine, which means it contains the dead influenza viruses. It is administered by injection with a needle. The flu shot is approved for use in people 6 months of age and older, including both healthy people and people with chronic medical conditions.
  - The nasal-spray flu vaccine is a vaccine made with living, but weakened flu viruses that do not cause the flu. It is also known as “Live Attenuated Influenza Vaccine” or LAIV. LAIV is approved for use in healthy people 2-49 years of age who are not pregnant.
    - The nasal-spray is not ideal for healthy people who have regular contact with people with severely compromised immune systems; instead they should get the inactive flu shot.
- Antiviral drugs are also an option to prevent the flu, but they are only 70-90% effective, and are generally made available only to those who cannot get another form of influenza vaccine.
- The flu can also be prevented with simple hygienic practices: cover your nose and mouth when you cough or sneeze (cough and sneeze into the crook of your arm rather than your hands to prevent the spreading of germs), wash your hands with soap and water regularly or with alcohol based hand sanitizer (a hand sanitizer should be at least 60% alcohol), avoid people who are sick to the best of your ability, if
you are sick stay home, and avoid public places such as school and work, try not to touch your eyes nose or mouth.

How does the flu vaccine work?
- Two weeks after exposure to the flu shot or the nasal-spray flu vaccine, the body develops antibodies that will then protect against the flu viruses when exposed.

Should I get vaccinated?
- Anyone who wants to reduce his or her chance of becoming sick with the flu should be vaccinated.
- However, some people in particular should get vaccinated because they are at high risk for serious complication if they become sick with the flu:
  - Children between 6 months and 5 years old, pregnant women, people 50 years of age and older, people of any age with certain chronic medical conditions (i.e. diabetes, asthma, and heart disease), and people living in nursing homes or other long term care facilities
- If you live with, or are in close contact with, a high risk person, you should also get the flu shot for their protection as well as your own.

When should I get the flu vaccine?
- You can get either flu vaccine as soon as they are available in the fall; the vaccine will continue to be effective and helpful in December, January and beyond. The flu season can begin as early as October, but it usually peaks in January.

Who should avoid the flu vaccine?
- People with severe allergies to chicken eggs
- People who have had a severe reaction to an influenza vaccination in the past
- People who have previously developed Guillain-Barre Syndrome within 6 weeks of getting a flu vaccine
- Children less than six months of age
- People who have a moderate or severe illness with a fever should wait to get vaccinated until their symptoms lessen and their fever goes down

Why do I have to get the flu vaccine again every year, why isn’t once enough?
- The influenza viruses change and adapt; each year, seasonal flu is caused by different strains of the influenza viruses. The viruses change and adapt in two different ways.
  - Antigenic drift results in small changes in the virus, while these are small gradual changes, they are significant enough to prevent the body’s previously developed antibodies from recognizing the virus. This is why a person can get sick with the flu more than once. This type of adaptation is very common.
  - Antigenic shift, on the other hand, is an abrupt and dramatic change. This change leaves most people with little or no protection from the virus and often results in very serious influenza outbreaks. This type of change is rare.

Where can I get a flu vaccine at MIT?
- MIT Medical offers flu shots. You can either get a flu shot during a regular visit with your physician, or you can make a special appointment for the flu shot.
- There are vaccination clinics set up around campus for your convenience.
- You can call 617-253-4865 to make an appointment, call your primary physician or go to Patient Online: http://web.mit.edu/medical/login.html

References:
The Center for Disease Control and Prevention, http://www.cdc.gov/flu/