The Do Bugs Need Drugs? program is a community program about the wise use of antibiotics.
Today we are here to talk about germs and what you can do to keep from getting sick. This is especially important for you because of where you live. When you live together with other people, such as in an assisted living facility or nursing home, germs can easily be spread from one person to another.

Question:
Can you think of some illnesses that are caused by germs?

Let residents give some answers.
Sum up - Colds, the flu or influenza, and pneumonia are some of the infections caused by germs. Many of these infections affect the respiratory tract, which is your nose, throat, and lungs.

Question:
Can you think of some examples of how germs are spread from one person to another?

Let residents give some answers.
Sum up - The most common way that germs are passed from one person to another is through the hands. 80% of common infections can be spread by the hands.
Germs, of course, are very small, so small that they can only be seen under a microscope.
Surveys done by researchers at the University of Arizona have shown that telephones, handrails, pens and other things that are shared with many people are the most contaminated.

**Question:**
So if germs are everywhere, why don’t we get sick all of the time?

*Let residents give some answers.*

**Sum up -** Our body protects us against germs and most of the time it does a good job.

For example, our skin keeps germs out of our body and our immune system fights germs that might get inside our body.

**Question:**
What are some of the ways you can protect yourself against germs?

*Ask for resident responses.*
Sum up - The best way to protect yourself against germs is to Wash Your Hands.

In fact, this message has been the same for the past 85 years or so. This quote is from the textbook *Hygiene and Sanitation* written in 1920.

(Read quote for audience)

A person who is trying to avoid the germs of colds should not borrow pencils, books or other articles from anyone who has a cold; he should not touch soiled handkerchiefs, use public drinking cups or stand near anyone who is coughing without turning away from him; he should keep his hands away from his own mouth and nose, and should frequently wash his hands thoroughly with soap and water (page 161). He should also avoid wet
Question:
So, when should you wash your hands?

*Sum up* - You should wash your hands after touching objects that might be contaminated, for example, public telephones. It is also important to wash your hands whenever you are doing something that brings your hands to your face.
The mouth is the most common route of entry for most viruses and bacteria. Therefore handwashing is important before food preparation and before eating. This picture shows how easy it is to get germs into the mouth when we eat – especially for foods that are held in our hands.
After using the toilet, blowing your nose or sneezing.
Hands should be washed after playing with animals and pets.
We also should remember that objects shared with other people are a source of contamination. Money is a good example. Shared objects are places where germs can be left by one person and picked up by someone else. You should wash your hands after touching objects that might be contaminated by others.
It is also important to wash your hands whenever you are doing something that brings your hands up to your face, such as eating or brushing your teeth. This is because germs get into your body through your mucous membranes.

The mucus membranes are the wet linings of the eyes, nose, mouth.

These are also places that we touch with our hands. We rub our eyes when they are irritated. We put our fingers in our nose (especially children) when it is stuffed up.

People put their hands to their mouths when they eat, bite their nails, as a social gesture to indicate “I’m thinking”, when they smoke and when they floss (some of which are healthy activities and some are not).

Transferring germs from the hands to the mucous membranes is the way that infectious agents enter the body to cause disease. So you can see, it is important to wash your hands as often as possible.
**Sum Up**

It is important to wash your hands as often as you can. At the very least, try to clean your hands:

1. Before you eat
2. After using the washroom
3. After you sneeze or blow your nose
4. After handling objects that are shared by others.
It is equally important to wash your hands properly.

Just rinsing your hands with water won’t work. You need to use soap and water and you need to wash your hands for long enough to remove the germs. When you are finished, dry your hands thoroughly with a towel. This also helps remove germs from your hands.
**Handwashing Demo** - Using the Handwashing Poster as a reference, review the Steps of Handwashing with residents.

1. Wet Your Hands
2. Apply soap.
3. Rub hands together.
4. Rinse your hands.
5. Dry your hands.
6. Turn off taps with a paper towel.

One way to make sure you use soap for long enough is by singing a song that takes 20 seconds, such as Happy Birthday or A Bicycle Built for Two.

*Optional Activity*

Which song do you want to sing? Is any one having a birthday this week?

*Lead the group in song - Any song will do as long as it takes 20 seconds.*

**A Bicycle Built for Two**

Daisy, Daisy, Give me your answer, do
I'm half-crazy, All for the love of you.
It won't be a stylish marriage,
I can't afford a carriage,
But you'll look sweet upon the seat
Of a bicycle built for two.
Handwashing Demo  (cont.) Using the Soaping Up poster as a reference, review the parts of the hands to wash with residents.

1. Palms
2. Between the fingers
3. Backs of the hands
4. Wrists
5. Thumbs
6. Fingertips
7. Nails

- Remind residents that both hands need to be washed.
- For step 6, show how to cup the fingers of one hand into the fingers of the other hand.
- For step 7, there is no need to go under each nail individually. The nails can be cleaned quite effectively by gathering all of the fingers of one hand together and rubbing them against the opposite palm.

If possible, show the Adult Handwashing Video to residents.
For some of you it might be difficult to get to a sink. Alcohol-based hand rubs are a good option if you can’t get to a sink.

Hand sanitizers aren’t a substitute for handwashing. The primary reason is that hand sanitizers don’t remove dirt or grease that attract germs. It is therefore important to wash with soap and water whenever possible.
Bacteria and viruses are the germs that cause nearly all of the infections of the respiratory tract. Although both bacteria and viruses can make you sick, these germs are very different from each other.
Bacteria and viruses are both so small that you can only see them with a microscope. Although both are very small, bacteria are 20 times larger than viruses.

Bacteria are more complex organisms than viruses and can be attacked by antibiotics. Viruses are simpler and antibiotics have no effect.

Pneumonia, which is a serious illness, is often caused by bacteria.

Colds and the flu are caused by viruses.
Here are the same pictures, but adjusted to show the relative sizes of viruses and bacteria. Viruses are 20 times smaller than bacteria, and are much simpler so that antibiotics don’t have anything to attack.
Most respiratory tract infections are caused by viruses. Colds, flu, most sore throats, coughs, etc. are viral infections.

Antibiotics do not work against viral infections.
Bacterial infections are less common than viral infections and are less contagious.

It is important to remember that the most serious respiratory tract infection, pneumonia, is usually caused by bacteria.

The major reason for making sure we use antibiotics wisely is to preserve the usefulness of antibiotics for this very serious illness.

Antibiotics work against bacteria.
Many people hope that antibiotics will help them get better faster when they have a cold or the flu, but antibiotics don’t work against viruses.

Something else happens though when you take antibiotics for viral infections that can have serious medical consequences.
**Question:**
Have any of you heard of antibiotic resistance?

**Sum up**
Bacteria are able to quickly adapt to avoid being killed by antibiotics. These bacteria are said to be resistant to antibiotics.

Bacteria have antibiotic resistance when antibiotics don't work anymore. The bacteria become stronger and harder to kill.
The potential for bacteria to develop antibiotic resistance happens whenever you take antibiotics.

That’s why it is important to only use antibiotics when you really need them.
You may have read about superbugs in the newspaper or heard about them on TV. Superbugs are resistant to many antibiotics and infections that are caused by superbugs are a very serious problem because antibiotics won’t work against them.
The best thing you can do is to **wash your hands** so that you can avoid getting sick in the first place.
Handwashing is the best way to prevent the spread of infections.

Viruses and bacteria are very different from each other. Not all bugs need drugs. Infections caused by viruses don’t get better with antibiotics.

Using antibiotics for colds and the flu can cause antibiotic resistance.
Thank you!