

# Do Bugs Need Drugs?

A Community Program for Wise Use of Antibiotics



## Older Adults Program

This program is designed for:

Older Adults  
Assisted Living Sites  
Long Term Care Sites  
Adults with Disabilities  
Home Care

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*\*The interactive dialogue presented here has the same information as the powerpoint presentation slide show. Use this dialogue if you are not using the powerpoint presentation.*

## Tips on presenting

Many people in your audience may have hearing deficiencies. Speak up. Ask if everyone can hear you. Invite anyone who is having trouble hearing to put up their hand.

Individuals who suffer from some types of dementia are unsure of themselves. Try not to put anyone on the spot.

Many older adults are lonely and they'll be happy to have you visiting them. They like to shake hands.

Information processing takes longer as we age or if we have some cognitive issues. Remember to take this into account. Don't rush your presentation, and allow ample time for someone to respond to questions. There will be many who won't answer questions and a few who are eager.

Some people move more slowly and often require assistance. Be patient. Ask if they would like help before doing something for them.

Safety is a huge concern. If you are unsure of helping someone move around, ask a staff member for assistance.

Keep it simple, but do not be condescending.

With a bit of prompting, someone will know the song. They'll teach you.

Refer to printed materials as a way to review information the audience has learned.

Always treat your audience with dignity and respect.

## Kit contents

Quantity	Item
1 per person	Name tags (presenters, audience)
1	Glo Germ gel
1	Glo Germ powder
1	Black light with batteries
8	Spare AA batteries
1 set of 15	Photos for "BUG" bingo
15	"BUG" bingo cards
2	Bars of soap for bingo prizes
15	Crayons for name tags and bingo cards

## Print materials

Quantity	Item
2 per site	Do Bugs Need Drugs? posters
1 per participant	Wash Your Hands stickers
	How to Wash Your Hands sign
	Soaping up sign
	Parent Guide
	Pamphlet
	Crossword
	Word search

# Preparation: things to do before your presentation

## 1. Review the program and teaching materials

- Take some time before the presentation to familiarize yourself with the content and materials to be presented.
- Try out Activity 3 “Handwashing Practice” and Activity 4 “How Germs Are Spread”. Know how the activity is supposed to work and ensure that the equipment is in good order.
- If needed, copy more “BUG” bingo cards for Activity 4 so that there is one per participant.
- Make sure your kit contents are complete (see list on page 4).
- Count print materials to make sure there are enough for the number of participants that you are expecting.

## 2. Call ahead

- Speak with the person on site who is looking after your presentation.
- Introduce yourself and your team. Confirm date and time of presentation.
- Ask how to find the site and the main entrance. Assisted living and long term care sites often have multiple entrances, but only one is for visitors.
- **Find out about your audience.** This will help you to tailor your presentation to the level of your audience. Things to consider asking:
  - How many individuals/staff will be attending
  - Ask about the mobility of the audience (wheelchairs, walkers, etc.)
  - Discuss the capabilities and needs of the audience



- **Ask about the physical layout of the facility**

- Are the handwashing facilities close by?
- Can the meeting room accommodate a powerpoint presentation? Is a screen available? Can lights be dimmed? (If not using the powerpoint presentation slide show, use the interactive dialogue by itself for Activity 2. This is the same information as the notes pages provided in the powerpoint presentation.)
- Are tables and chairs available for the audience to use?
- Is there a sink in the room where you are presenting? Is it possible for some of the audience to actually do the handwashing demonstration? If this is not possible, ask the staff to provide a basin of water, soap and disposable paper towels for you to do a handwashing demonstration. If this isn't convenient, demonstrate the steps without soap and water and ask the audience to do the steps with you.

### **3. Be mentally prepared: things you will need to do during your presentation**

- Continue to assess the audience as you are presenting and remain flexible
- Your audience may be getting tired or disinterested. You may need to shorten your presentation or start activities sooner.
- The messages may need to be simplified depending on the audience or the message may need to be made more "technical" or difficult if the level of the audience warrants it. You will get a feel for this as you are presenting. Change things up as needed.
- Relate information to everyday life and circumstances.
- Review content as needed.
- Allow time for questions and feedback.

- **Note:** People may ask questions regarding their own medications, which may or may not be antibiotics. If you are confident in answering their questions, do so. Otherwise, direct them to the staff or their doctors.

#### **4. Arrive ahead of time and reassess your space**

- Arrive early enough at the facility to allow time for setup.
- Check out the space and then make any changes to your presentation as needed. You may need to change some of the activities that you had originally planned.
- Find out how to dim the lights in the room if using the powerpoint presentation.

## Activity 1. Introductions and name tags

Notes:

- A good way to get to know people is to introduce yourself to each person and ask them what their name is. When introducing yourself, state your name and add a bit of personal information.
- Talk with members of your audience to get a feel for them. It will help with the remainder of your presentation.
- Speak slowly and clearly. Ask your audience if they can hear you.
- You will be asking audience members to put on name tags. Some may need help.
- Note: Some sites require individuals and staff to wear name tags provided by the site, so you may not need name tags for your audience.
- This activity can proceed as the audience is gathering.

Time: 5 minutes

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### **Introductions and name tags**

Hello, we are from \_\_\_\_\_. It is nice to see you here. Thank you for coming. So that we can get to know you better, we have name tags and have name tags for you as well. Would you mind wearing a name tag?

My name is \_\_\_\_\_ and I am \_\_\_\_\_ (provide a bit of information about yourself such as where you are from) and am studying to be a \_\_\_\_\_.

## Activity 2. Interactive dialogue - key messages

Notes:

- Remember to speak slowly and clearly. Ask the audience if they can hear you.
- Ask questions, allow audience to participate with answers and then sum up the message you wish to deliver.

Time: 15-20 minutes

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*The interactive dialogue presented here has the same information as the powerpoint presentation slide show. Use this dialogue if you are not using the powerpoint presentation.*

### **Interactive dialogue - Key messages**

Do Bugs Need Drugs? is a community education program about infections and handwashing. We have 3 Key Messages:

1. Handwashing is the best way to stop the spread of infections.
2. Not all bugs are created equal. By this we mean that not all germs are the same. Bacteria and viruses are different and antibiotics don't work against viruses.
3. Antibiotics should only be used for bacterial infections. Using antibiotics for viral infections causes bacteria to become resistant so that antibiotics don't work anymore.

So today we are here to talk about germs and what you can do to keep from getting sick.

If you are living together with other people, whether it's in a group home, assisted living site, nursing home or in a family, germs can easily be spread from one person to another.

Question:

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

*Let audience give some answers.*

*Sum up* - Colds, the flu or influenza, or pneumonia are illnesses caused by germs. Many of these illnesses 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 audience give some answers.*

*Sum up* - The most common way that germs are passed from one person to another is by 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. But just because you can't see them doesn't mean they aren't there. Surveys done by researchers at the University of Arizona<sup>1</sup> 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 audience 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.

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<sup>1</sup> Reynolds KA, Watt PM, Boone SA, Gerba CP. Occurrence of bacteria and biochemical markers on public surfaces. Int J Environ Health Res 2005; 15(3):225-34.



Question:

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

*Ask for audience 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<sup>2</sup>.

*(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.

Question:

So, if it's important to keep your hands clean, when are some times when your hands might have a lot of germs on them?

*Ask for audience responses.*

*Sum up* - You should wash your hands after touching objects that might be contaminated.

Always wash your hands after using the toilet, and as soon as you can after blowing your nose or sneezing.

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<sup>2</sup> Ritchie JW, Caldwell JS. New-World Health Series. Hygiene and Sanitation. Book II. New York: World Book Company; 1920, p. 51  
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Remember to also wash your hands after playing with animals and pets because animals can carry germs that cause infections.

Objects that are shared with other people are also a source of contamination. Shared objects are places where germs can be left by one person and picked up by someone else. Public telephones, elevator buttons and money are good examples. You should wash your hands after touching objects that might be contaminated with germs from other people.

It is also important to wash your hands whenever you are doing something that brings your hands to your face. You don't get sick just by having germs on your hands. You get sick when germs get into the body to cause an infection.

Germs get into the body through the mucous membranes. These are the wet linings of the eyes, nose and mouth.

Question:

When are some times when you touch your mucous membranes with your hands?

*Allow the audience to answer.*

*Sum up:* People often touch their mucous membranes with their hands. We rub our eyes and pick our noses. We put our fingers up to our mouths when we eat, bite our nails, smoke and floss our teeth. Germs can also get into the mouth from foods that we hold in our hands.

Therefore handwashing is important before you prepare food and before eating. It is also important to wash your hands whenever you are doing other things that bring your hands up to your face, such brushing your teeth or flossing. Handwashing will remove the germs from your hands that might otherwise get into your body through your mucous membranes.

It is important to wash your hands whenever they might have a lot of germs on them and before activities when your hands might come in contact with your mucous membranes.

So 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 with 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 How to Wash Your Hands and the Soaping Up signs as references, review the Steps of Handwashing with the audience.

1. Wet your hands.
2. Apply plain soap.
3. Rub hands together. Make sure to wash all parts of the hands: palms, between your fingers, backs wrists, thumbs, fingertips and nails.
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<sup>3</sup>.

### *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.

Rub your hands together while singing and ask the audience to do the same.

### **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.

If possible, show the Adult Handwashing Video to the audience.

#### Question:

What about hand sanitizers? Do any of you use hand sanitizers?

*Allow audience to answer.*

*Sum up:* 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 main 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.

Remember that if you use a hand sanitizer, make sure it is alcohol-based. Only alcohol-based hand sanitizers are recommended by the Public Health Agency of Canada.

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<sup>3</sup> The words and tunes to A Bicycle Built for Two and other old favorites can be found on YouTube.  
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Even if you do wash your hands often and properly, sometimes you do get sick. This means that a germ has gotten into your body and is making you ill. But not all germs are the same. Nearly all common infections are due either to bacteria or viruses.

Bacteria and viruses are not the same. Although both are microscopic, bacteria are much larger than viruses. Bacteria are more complex; each bacterial cell can manufacture proteins, divide, multiply, and carry out all the processes of living organisms. Viruses are much simpler; they don't live on their own and basically consist of genetic material surrounded by a protective coating.

Question:

Do you think antibiotics work against bacteria? Against viruses?

*Allow the audience to answer.*

*Sum up:* Because bacteria are more complicated, they have a lot of targets that antibiotics can attack. Viruses, because they are so simple, do not have any targets that antibiotics can attack. That is why antibiotics work against bacteria but not against viruses.

Question:

Are colds caused by bacteria or viruses? What about influenza? How about bronchitis or chest colds?

*Allow the audience to answer.*

*Sum up:* Most respiratory tract infections are caused by viruses. Colds, flu, and most sore throats and coughs are due to viruses. Many people think that bronchitis is a bacterial infection, but bronchitis is nearly always caused by viruses, unless you have an underlying medical condition like emphysema or COPD. Antibiotics do not work against viral infections.

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Bacterial infections are less common than viral infections and are less contagious. Pneumonia, which is the most serious respiratory tract infection, is often caused by bacteria and antibiotics will help.

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?

*Allow the audience to participate.*

*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. If you have an infection caused by resistant bacteria, you will continue to be sick, even if you are taking an antibiotic.

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 no antibiotics will work against them. We all need to use antibiotics only when they are really needed to stop the development of superbugs.



## **Remember . . .**

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.

## Activity 3. Handwashing practice

### Notes:

- Once you know the size of your audience and the availability of sinks, decide whether you have time or the capacity for everyone to wash their hands. If not, consider doing a demonstration and ask for a few volunteers.
- If a sink is not close to your audience, use a basin of water. Have one person only do the demo. The water should only be used for one washing, to avoid cross contamination.

### Preparation:

- Know where the handwashing facilities are on site or use a basin
- Ask how to dim or turn off the lights on site.

### Materials:

- Black light
- Glo Germ gel
- Sink or basin
- Plain soap
- Paper towels

Time: 10 minutes

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### Handwashing practice

This activity should be done close to a sink, or use a basin. If using a basin, have one person only do the demo to avoid cross contamination. You will need plain soap and paper towels.

The Glo Germ gel is a tool for teaching proper handwashing. When the gel is on your hands it is invisible in regular light, but when viewed under a black light the gel glows.

The Glo Germ gel is non-toxic. It is made of baby lotion and also contains a substance that fluoresces when exposed to ultraviolet light. Dim the lights and show that the gel glows by shining the black light on the container.

Demonstrate handwashing on yourself first:

1. Darken the room. Shine the black light on your hands to show that they do not glow without any gel. Walk among the audience to make it easier for them to see.
2. Apply a small amount of gel (about the size of an ASA tablet) on your hands and rub your hands together to distribute to both the front and back of your hands. Shine the black light on your hands to see the glow.
3. Without the black light wash your hands using good handwashing technique. Ask participants to sing the chosen song.
4. Shine the light on your hands to see how well you have washed.

Have the audience repeat the exercise or proceed with a few volunteers.

## Activity 4. How germs are spread and “BUG” bingo

### Materials:

- Glo Germ powder
- Black light
- 15 photographs of shared objects
- “BUG” bingo cards
- Crayons

Time: 10 minutes

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### How germs are spread

Glo Germ powder is used to show how germs can be spread via the hands. Similar to Glo Germ lotion, when the powder is on your hands it is invisible in regular light, but when viewed under a black light the powder glows.

The Glo Germ powder is non-toxic. It is made of melamine, a substance that fluoresces when exposed to ultraviolet light. Dim the lights and show that the powder glows by shining the black light on the container.

Shine the black light on your hands to show that they do not glow without the powder. Sprinkle a small amount of powder (one shake) on the palms of your hands and show that they glow under the black light.

Explain that the Glo Germ powder will be transferred from your hands to objects that you touch, and that you will look to see where the powder has been deposited later.

## Hot spots

Initiate a discussion with your group to identify “hot spots” in their facility. Hot spots are surfaces that are touched by many people. The bingo game uses photographs of potential hot spots.

## “BUG” Bingo

- Hand out bingo cards/crayons to each participant.
- “Shuffle” the 15 large photographs. Call bingo using the photographs and corresponding letters, for example “under the “B”, playing cards.”
- Participants mark pictures off on bingo cards using daubers or crayons.
- Offer assistance where necessary.
- Once all pictures are covered on a card, the participant calls “Bingo”
- Congratulate the winner(s) and present the prize (bar of soap)!

Ask people / staff if there are other objects that should have been included in the set of photographs.

Interesting fact: Money is particularly dirty. Over 90% of the one dollar bills in circulation in the United States are contaminated with cocaine.<sup>4</sup>

## How germs are spread (continued)

Remind the audience about the Glo Germ powder and that you are now going to look for traces of the powder in the area where you have been working. Dim the lights. Explain that the Glo Germ shows which objects were touched during your presentation and demonstrates how easy it is to spread germs by your hands.

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<sup>4</sup> Jenkins AJ. Drug contamination of US paper currency. Forensic Sci Int 2001;121(3):189-93.  
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## Activity 5. Review and thank you

**Distribute resource materials.** The materials are reminders of the key messages. Extras can be left at the site. Explain that the materials review the information in your presentation. Suggest that the audience share the information with family members.

For the site:

- 2 posters

For each participant:

- Wash Your Hands sticker
- How To Wash Your Hands sign
- Soaping Up sign
- Parent Guide
- Pamphlet
- Crossword puzzle in large print
- Word search in large print

**Sum Up.** Ask the audience if they know the three key messages:

1. Handwashing is the best way to prevent the spread of infections
2. Not all bugs are created equal. Bacteria and viruses are different and antibiotics do not work against viruses.
3. Use antibiotics wisely

**Ask people to help.** Be a model for good hygiene:

- Wash your hands
- Discuss the importance of handwashing with family and friends
- Teach by example

**Thank you.**

- Thank the audience for the opportunity to come to their site. Indicate that you enjoyed meeting them and that the experience was valuable for you.

### **After the Presentation**

- Some sites will have a recreation coordinator or someone who is in charge of activities for the center. Ask them if you can leave extra crossword puzzles, word searches or bingo cards for people to play at another time.
- Any activities that have not been used during the presentation can also be left with the recreation coordinator or whoever is in charge of activities. Remember to leave all instructions and materials for the activity.