

Infections and Diseases in the Long-Term Care Setting

6 HOUR CEU COURSE FOR RCFE AND ARF ADMINISTRATORS

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Course Objectives

01

Discuss universal precautions and bloodborne pathogens

02

Learn about bugs– the different types, symptoms and treatments

03

Discuss DSS infection control regulations for RCFE's and ARF's

04

Discuss OSHA regulations in regard to infectious diseases

Definitions

DSS = Department of Social Services

RCFE = Residential Care Facility for the Elderly

ARF = Adult Residential Facility

LPA = Licensing Program Analyst

SNF = Skilled Nursing Facility

AB = Assembly Bill

SB = Senate Bill

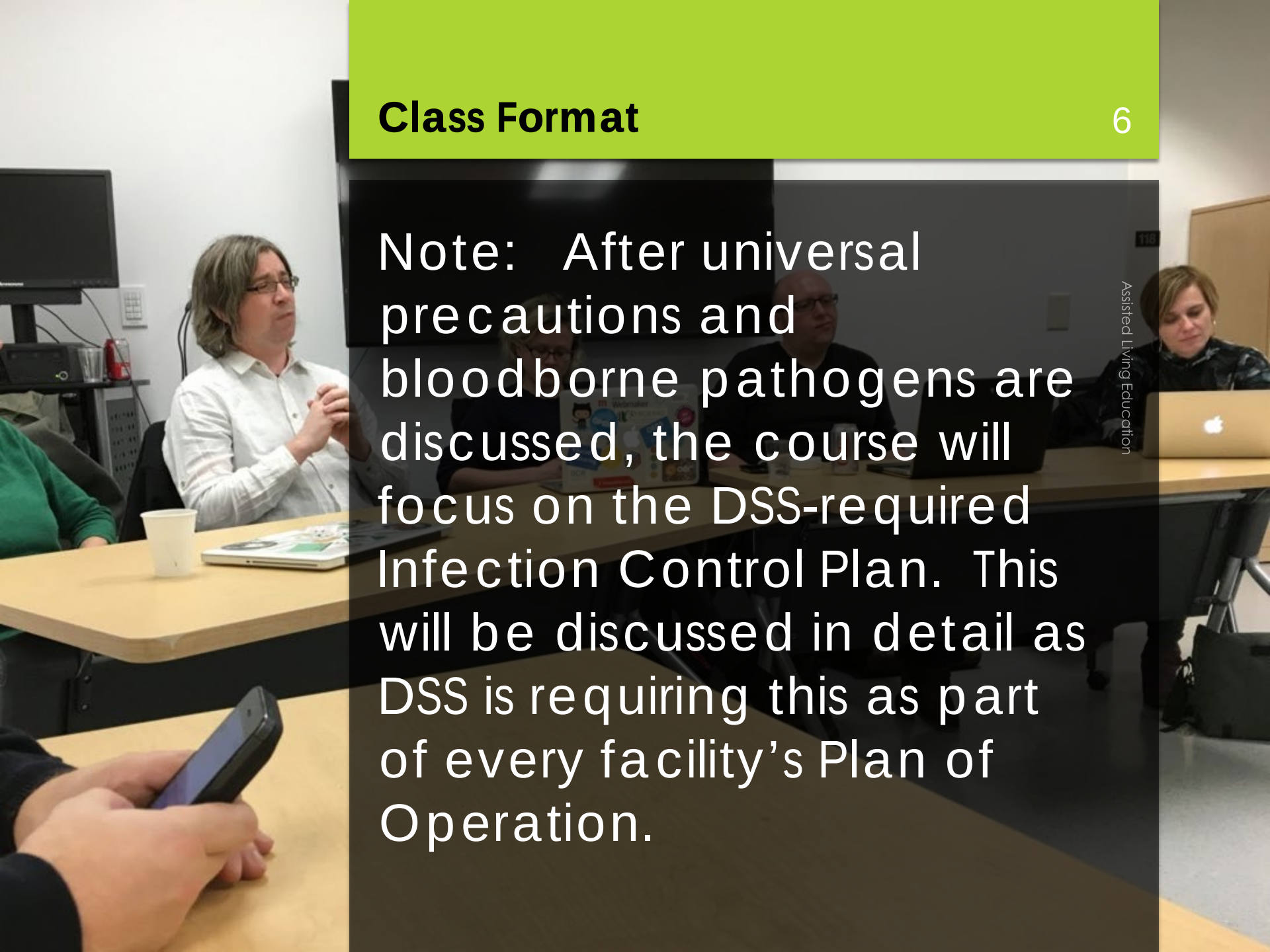
Resident = anyone living in long-term care

Sources

Many sources were consulted to prepare this course.

At the end of the course, these sources are listed.

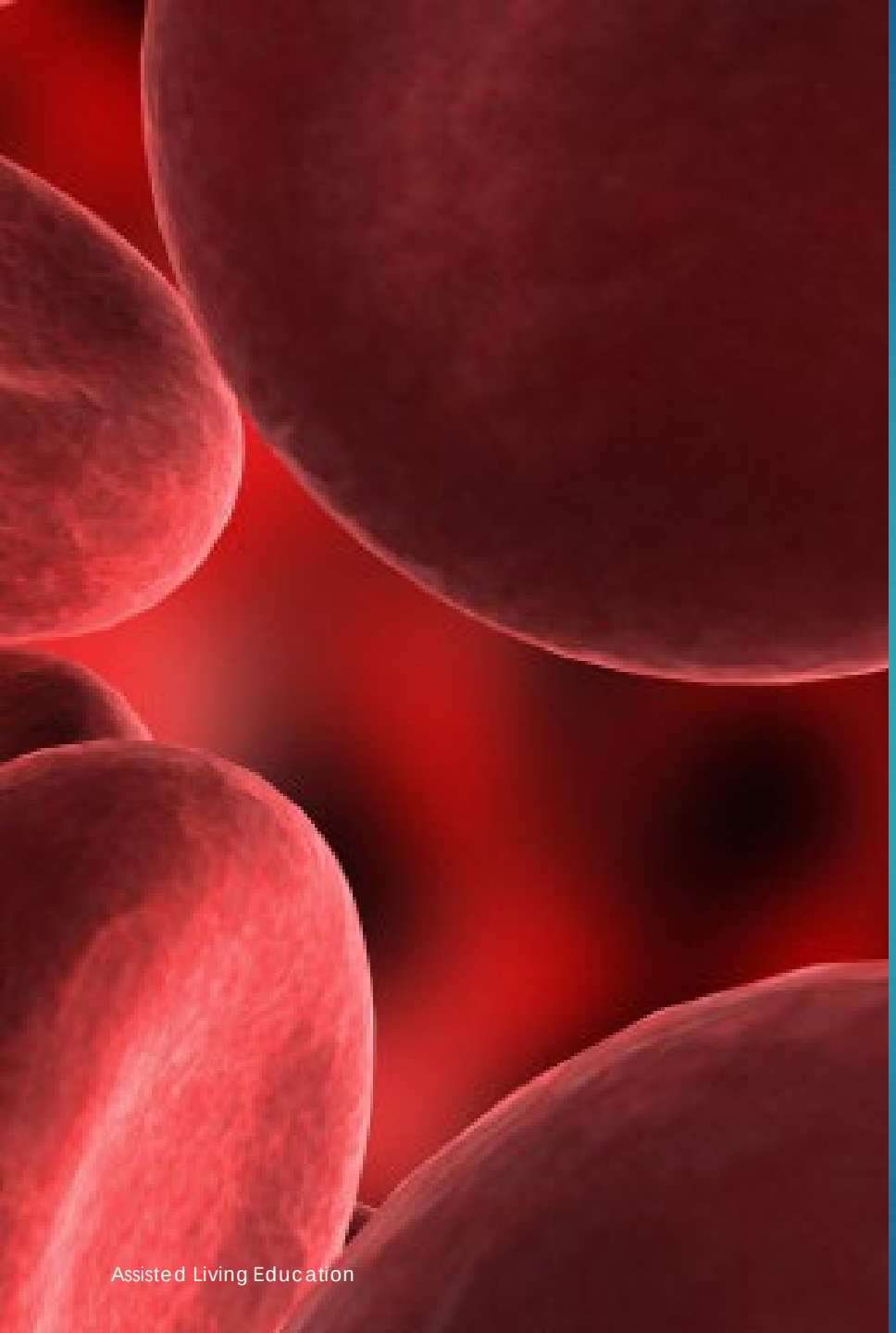




Class Format

Note: After universal precautions and bloodborne pathogens are discussed, the course will focus on the DSS-required Infection Control Plan. This will be discussed in detail as DSS is requiring this as part of every facility's Plan of Operation.

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Universal Precautions

When you provide personal care to the residents, you may come in contact with blood, urine, feces, soiled linens, soiled clothing, broken skin or cuts, or other bloodborne pathogens or body fluids.

What is a "*bloodborne pathogen*?"

Universal Precautions (cont'd)

Bloodborne pathogens are microorganisms that are present in human blood or other potentially infectious material (body fluids) that can cause disease in humans.

In the world of bloodborne pathogens, the most common is the Hepatitis B virus (HBV) and the most deadly is the human immunodeficiency virus (HIV).

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Universal Precautions (cont'd)

OSHA considers the following potentially infectious materials:

- Blood
- Saliva
- Semen
- Urine is not considered a potentially infectious material unless it contains visible blood.

Universal Precautions (cont'd)

Bloodborne pathogens may enter your body in a number of ways:

- When you touch a contaminated surface and then touch your eyes, nose, mouth, open wounds or inflamed skin; or
- By a sharp object that is contaminated by the virus when it cuts or punctures your skin (like a needle); or



Universal Precautions (cont'd)

Bloodborne pathogens may enter your body in a number of ways (cont'd):

- When a contaminated object touches inflamed skin, acne or skin abrasions (examples are contaminated gloves, needles or clothes)

Universal Precautions (cont'd)

So….because we may come in contact with bloodborne pathogens, we must practice **universal precautions**.

What does that mean?



Universal Precautions (cont'd)

Universal precautions means that you treat all human blood and body fluids as if they are infectious.

Because how do you really know by looking at someone if they have an infectious disease?

Universal Precautions (cont'd)

Specifically, universal precautions consist of the following four basic infection control guidelines:

1. Hand washing;
2. Wearing gloves;
3. Cleaning with disinfectants; and
4. Proper disposal of infectious materials



Universal Precautions – Hand washing



Hand washing:

1. When doing ADL's with the resident (incontinent care, bathing);
2. When handling food;
3. When coming into contact with bodily fluids;
4. After using the toilet;

Universal Precautions – Hand washing



Hand washing (cont'd):

5. Before and after treating and bandaging a cut;
6. After cleaning up spills, housekeeping;
7. After touching your hair or face; and
8. After smoking.

Universal Precautions – Wearing gloves

Teach your staff how to properly put on and take off gloves*.

ALWAYS have gloves available!

**[Requirements will be discussed in the upcoming slides]*



Universal Precautions (cont'd)

How to safely remove gloves:

1. With both hands gloved, peel one glove off until it comes off inside out.
2. With the bare hand, insert 2 fingers into the cuff of the remaining glove.
3. Pull down the glove so this glove also comes off inside out.
4. Dispose of both gloves properly and wash hands thoroughly.

Universal Precautions (cont'd)

Cleaning with disinfectants:

Bugs hate bleach. But so does your carpet....

So what should you use?



Universal Precautions (cont'd)



Proper cleaning solutions must be utilized to decontaminate a contaminated area.

A contaminated area is any area that is exposed to blood or any other potentially infectious material.

Universal Precautions (cont'd)

Proper cleaning solutions include, but are not limited to:

- Bleach with chlorine. This is the most common disinfecting substance for resident care equipment and contaminated surfaces. The typical solution if ¼ cup bleach for every ½ gallon of water. The solution should be prepared fresh every time it is used. Unused solution should be discarded immediately.
- EPA registered germicides
- Formula 49, Windex or other commercial disinfectants



Universal Precautions (cont'd)

To summarize how to reduce the risk:

- Cover any broken skin
- Wear gloves
- Use protective equipment
- Wash your hands

Universal Precautions (cont'd)



Treat ALL blood, bodily fluids, etc. as potentially infectious.



Bugs do not discriminate!



BUGS

BUGS

OK – let's talk more about those bugs…..



Hepatitis B

Hepatitis C

HIV/AIDS

MORE BUGS



Staph
MRSA
C. Diff
VRE
CRKP



MORE BUGS

Norovirus
Influenza
Foodborne Illnesses
COVID-19



Hepatitis B

First off……HIV and Hepatitis are not transmitted by:

- ✓ touching an infected person;
- ✓ coughing or sneezing; or
- ✓ using the same equipment, materials, toilet, water fountain or shower as an infected person

Hepatitis B

Hepatitis B Virus (HBV) –

One of the most common, serious infectious diseases in the world.

The virus attacks the liver.

It lives in bodily fluids such as blood, saliva, semen and vaginal secretions.

Hepatitis B -

According to the National Institutes of Health*, HBV is up to 100 times easier to transmit than HIV because the Hepatitis B virus can live in dried blood up to 7 to 10 days!!!!

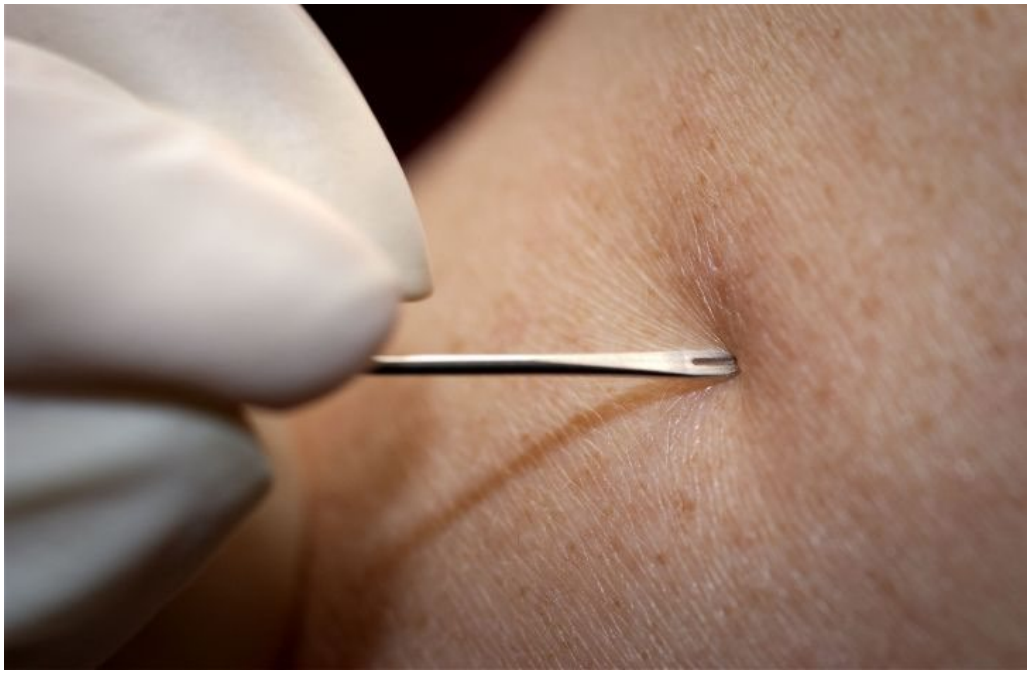
*Source: https://www.google.com/search?q=HBV+is+up+to+100+times+easier+to+transmit+than+HIV+because+the+Hepatitis+B+virus+can+live+in+dried+blood+up+to+7+to+10+days!!!!&rlz=1C1CHBF_enUS819US819&oq=HBV+is+up+to+100+times+easier+to+transmit+than+HIV+because+the+Hepatitis+B+virus+can+live+in+dried+blood+up+to+7+to+10+days!!!!&aqs=chrome..69i57.625j0j7&sourceid=chrome&ie=UTF-8

Hepatitis B

Your chances of being infected from a single contaminated needle stick for HIV is less than 1 percent.*

For HBV, your chance is 20-33%!!!!!

*Source: https://www.google.com/search?q=Your+chances+of+being+infected+from+a+single+contaminated+needle+stick+for+HIV+is+0.5+percent.&rlz=1C1CHBF_enUS819US819&oq=Your+chances+of+being+infected+from+a+single+contaminated+needle+stick+for+HIV+is+0.5+percent.&aqs=chrome..69i57.3311j0j9&sourceid=chrome&ie=UTF-8



Signs and symptoms of Hepatitis B:

* Known as the “silent infection” because some carriers of HBV may not become noticeably sick and may not realize they have the disease.
* Many people do not have symptoms when they are first infected.

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Hepatitis B

The incubation period of the Hepatitis B virus ranges from 30 to 180 days. The virus may be detected within 30 to 60 days after infection and can persist and develop into chronic hepatitis B.*

*Source: https://www.who.int/news-room/fact-sheets/detail/hepatitis-b

Signs and Symptoms of Hepatitis B

- Fatigue
- Loss of appetite
- Flu-like symptoms (may include mild fever, muscle and joint aches, nausea, vomiting and diarrhea)
- Jaundice (yellow skin and eyes)
- Acne
- Inflammation and ulcers of the colon
- Lung disease
- Inflammation of the liver

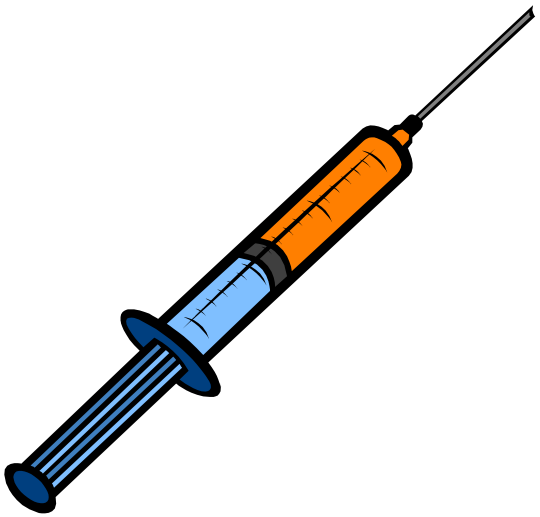
Hepatitis B

NOTE:

A person who shows no symptoms of Hepatitis B can still pass the disease to someone!



Hepatitis B



The HBV Vaccine:

This vaccine can prevent Hepatitis B.

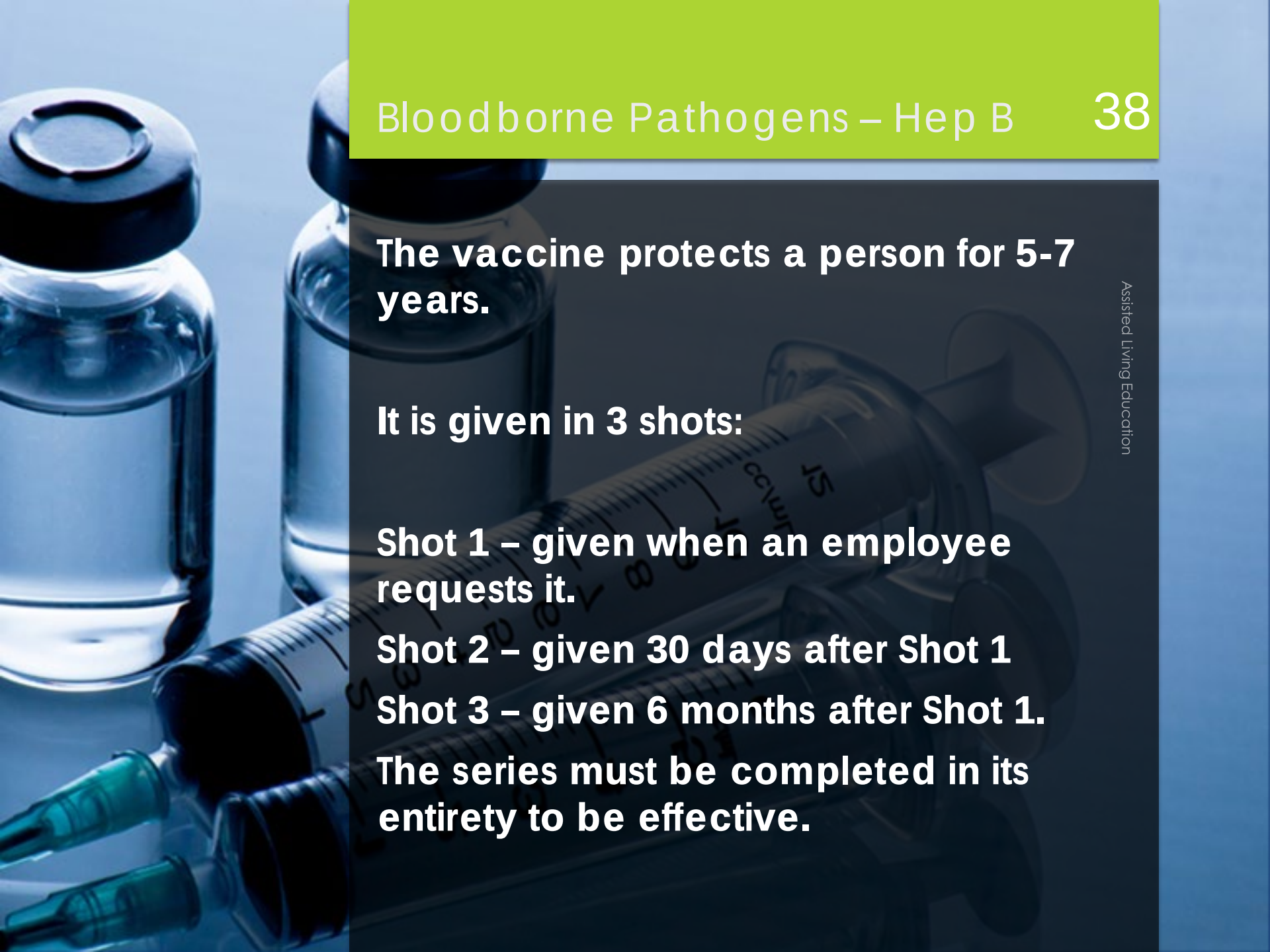
Given in a series of 3 doses over the period of six months and includes a follow-up blood test.

As an employer, you MUST offer this vaccination series to your employees. How?

Bloodborne Pathogens – Hep B

All employees in the Health Care Industry who perform procedures that involve inherent at-risk potential for bloodborne pathogens must be offered the Hepatitis B vaccine **within 10 days of hire**.

If the employee declines, they must sign a declination form – keep this in their employee file (as discussed in upcoming slides).



Bloodborne Pathogens – Hep B

The vaccine protects a person for 5-7 years.

It is given in 3 shots:

Shot 1 – given when an employee requests it.

Shot 2 – given 30 days after Shot 1

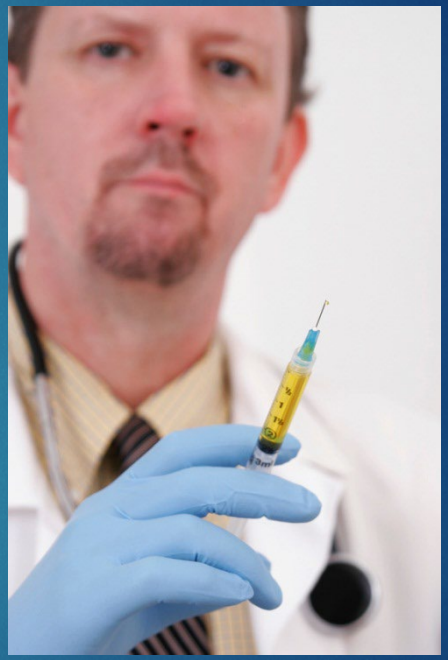
Shot 3 – given 6 months after Shot 1.

The series must be completed in its entirety to be effective.

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Bloodborne Pathogens – Hep B

As an employer, if the employee wants the Hep B vaccination, you MUST arrange it and pay for it.



Bloodborne Pathogens – Hep B

You will need to prepare an “acceptance” or “declination” form for every employee to sign.

This must also state that if an employee initially declines to receive it, and they change their mind, you MUST arrange for it and pay for it.

Hepatitis B

This is the link you want to review to create your facility's acceptance/declination form:

www.osha.gov/pls/oshaweb/owadisp.show_document?p_id=10052&p_table=STANDARDS

Summary:

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with hepatitis B vaccine, at no charge to myself. However, I decline hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Hepatitis B

Yikes! My employee may have been exposed. What do they do?

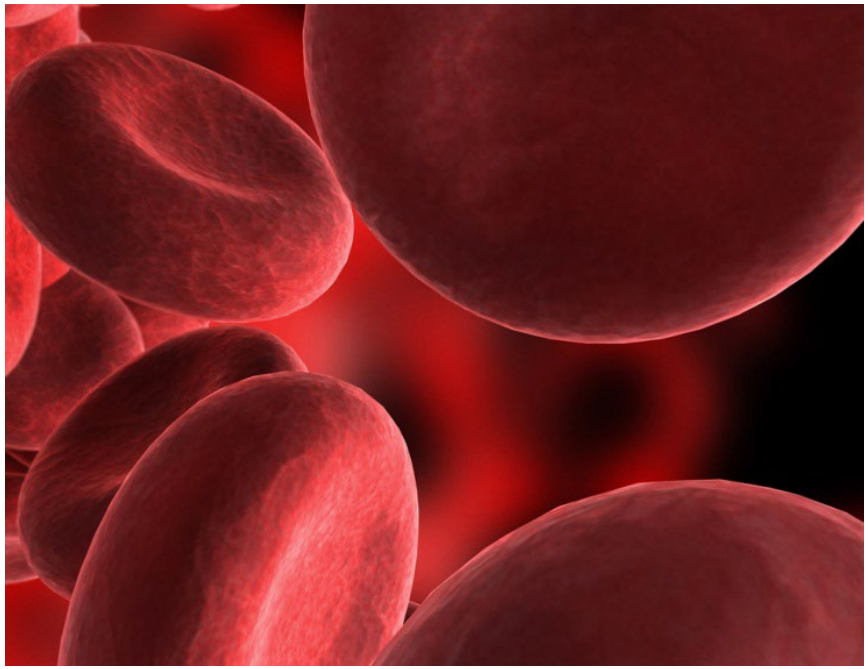
- Immediately report the incident to the supervisor – do not wait to tell them!
- Thoroughly wash the exposed area of the body with warm water, then scrub with soap and water.
- They will probably need to get a medical evaluation and follow-up treatment.

Hepatitis C

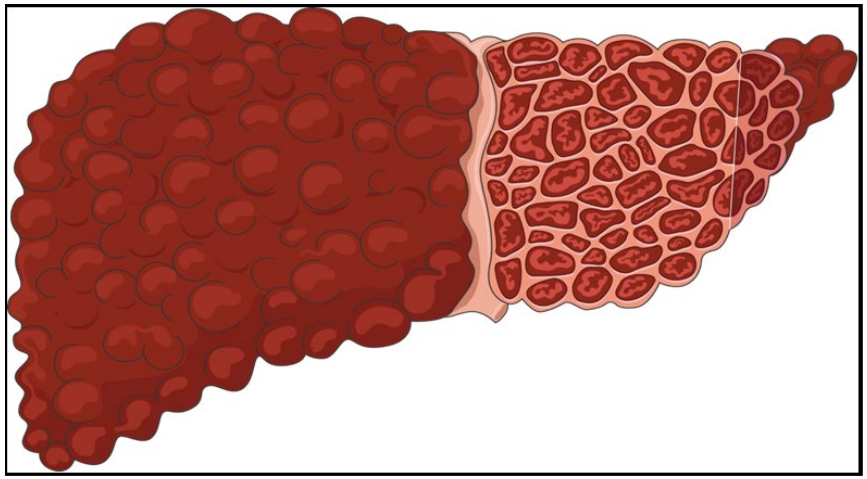
A viral disease that leads to swelling (inflammation) of the liver.

Spread by body fluids, shared needles, accidental needle sticks and maybe sexual contact.

It is not spread by shaking hands or casual contact.



Hepatitis C

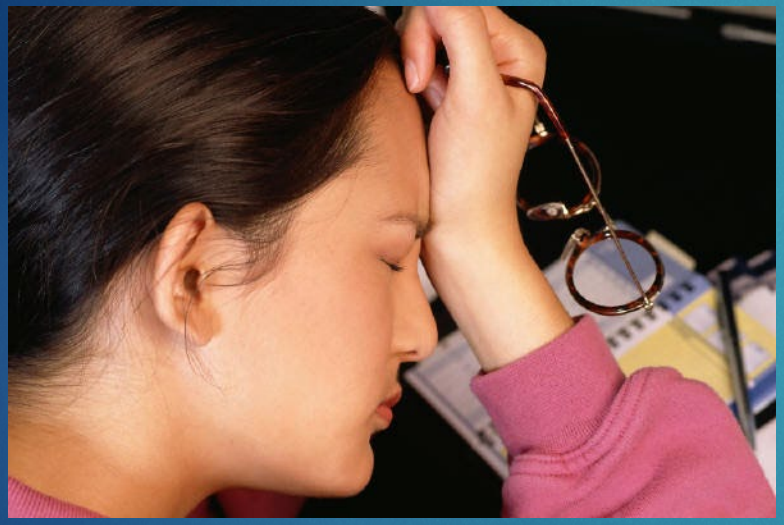


Many people who are infected with hepatitis C do not have symptoms.

If the infection has been present for many years, the liver may be permanently scarred, a condition called *cirrhosis*.

In many cases, there may be no symptoms of the disease until cirrhosis has developed.

Hepatitis C



Symptoms:

Loss of appetite

Fatigue

Abdominal pain

Dark urine

Jaundice

Low-grade fever

Hepatitis C

Who is at risk?

- Caregivers who have regular contact with blood at work
- Patients who have been on long-term kidney dialysis
- People who have unprotected sex with a person who has hepatitis C
- People who have received a blood transfusion before July, 1992

Hepatitis C

Currently, there is no cure for Hep C but the virus can be suppressed by medications for quite a long time.

Treatments include either an injectable medication or a capsule that is taken twice a day.

Hepatitis C

Patients need to avoid consuming alcohol - even moderate amounts of alcohol speed up the progression of hepatitis C, and alcohol reduces the effectiveness of treatment.



Hepatitis C

We will be discussing the new Hep C regulations later in this class.

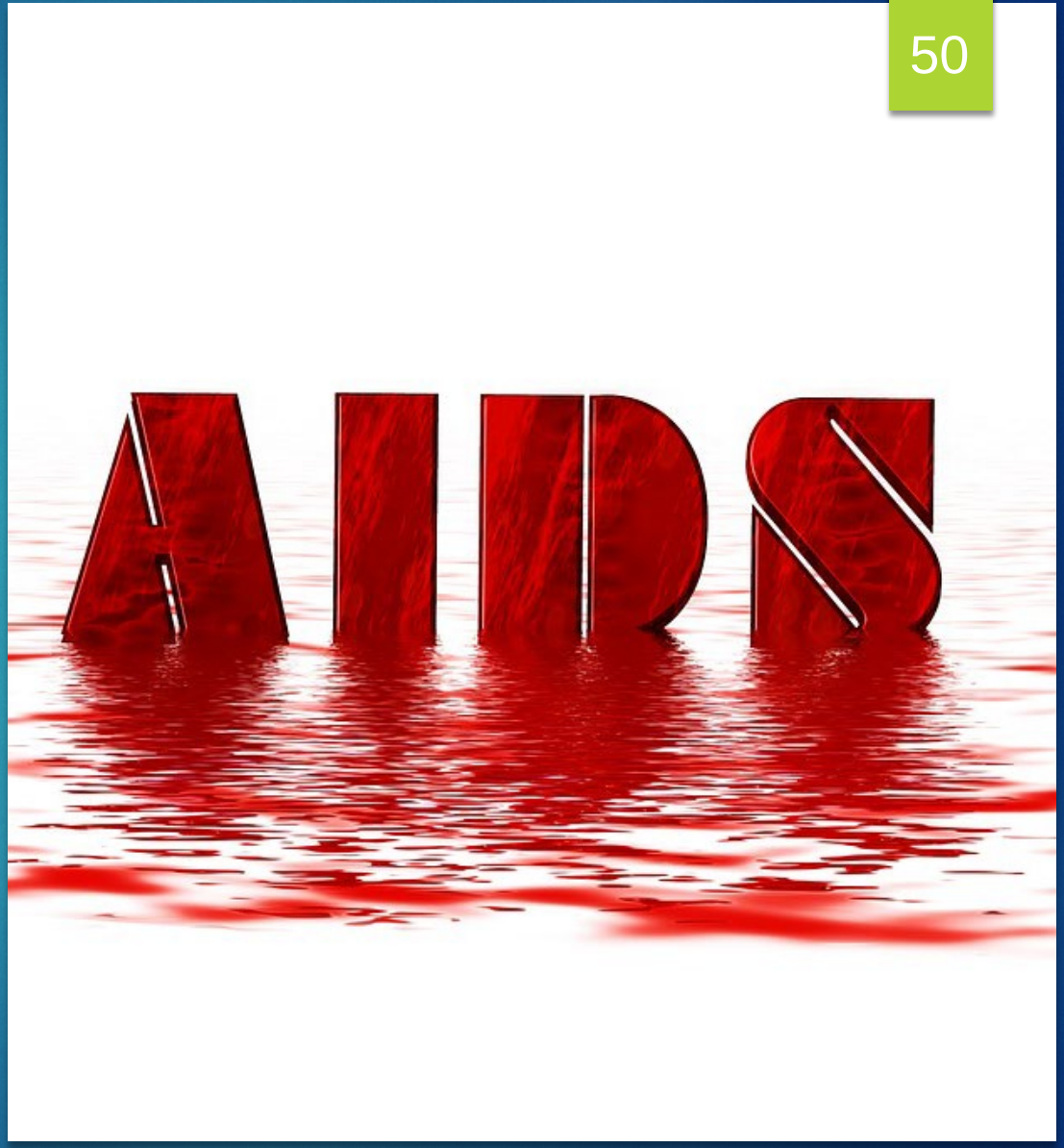
Title 22, Section 87609 for RCFE's.



HIV/AIDS

Human Immunodeficiency Virus (HIV)

- HIV is the 2nd most common, serious infectious virus.
- This virus leads to the disease known as AIDS.





HIV/AIDS

Human Immunodeficiency Virus (HIV)

- HIV attacks the body's immune system, making the body less able to fight off infections.
- In most cases, these infections eventually prove fatal.
- NOTE: There is no vaccination to prevent HIV.

HIV/AIDS

HIV – How is it transmitted?

- Similar to Hepatitis B, HIV is transmitted through bodily fluids such as blood, semen, vaginal secretions and breast milk.
- However, there is no evidence that HIV is transmitted through saliva, tears or sweat.
- HIV is **not** transmitted by touching, feeding or working around residents who carry the disease.

HIV/AIDS

HIV –

- The virus must be transmitted by direct contact with the bloodstream of another person.
- The virus cannot enter through contact with the skin UNLESS contact is made with an open wound and the virus is able to enter into the bloodstream.

HIV/AIDS

HIV –

- HIV is a virus that cannot survive outside of the body.
- It cannot be transmitted by coughing or sneezing.

NO



HIV/AIDS

What are the symptoms of HIV?

- weakness
- fever
- diarrhea
- sore throat
- nausea
- headaches
- weight loss
- swollen lymph glands
- a white coating on the tongue





HIV/AIDS

NOTE:

A person who shows no symptoms of HIV can still pass the disease to someone!

HIV/AIDS

Yikes! My employee may have been exposed. What do they do?

- Immediately report the incident to the supervisor – do not wait to tell them!
- Thoroughly wash the exposed area of the body with warm water, then scrub with soap and water.
- They will probably need to get a medical evaluation and follow-up treatment.

Staph Infection

Caused by a Staphylococcus

(or "staph") bacteria.

About 25% of people normally carry staph in their nose, mouth and on their skin and they're usually harmless.

The infection often begins with a little cut, which gets infected with bacteria.



Staph Infection



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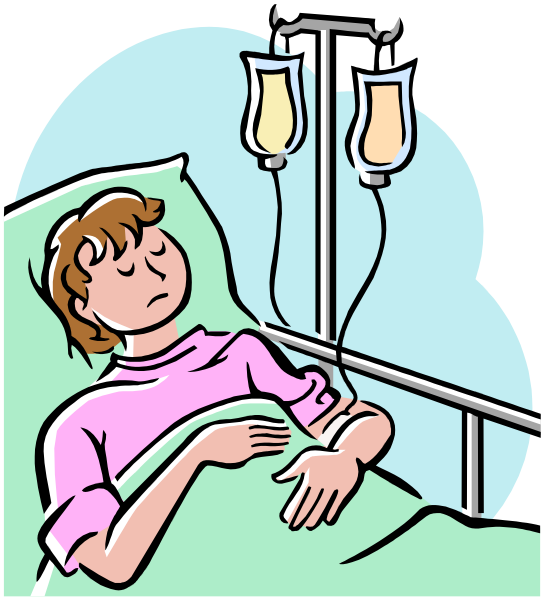
Staph Infection

Staph infections range from a simple boil to antibiotic-resistant infections to flesh-eating infections.

The difference between all these is the strength of the infection, how deep it goes, how fast it spreads, and how treatable it is with antibiotics.....or not!



Staph Infection



Anyone can get staph.

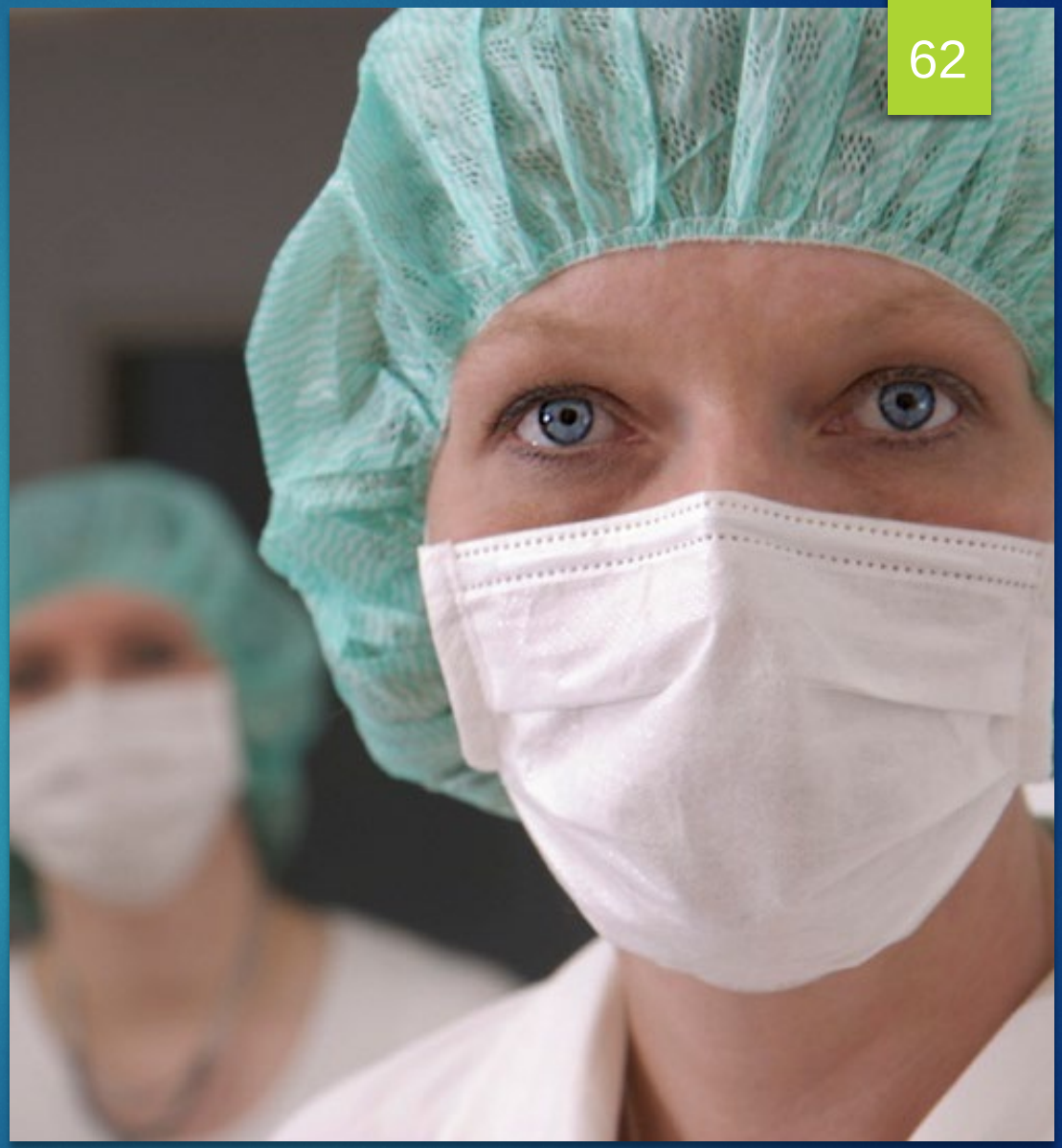
At risk:

- **seniors**
- **those with compromised immune systems**
- **patients in hospitals and long-term care facilities**
- **patients with indwelling catheters, etc.**

Staph Infection

Staph infections are contagious!

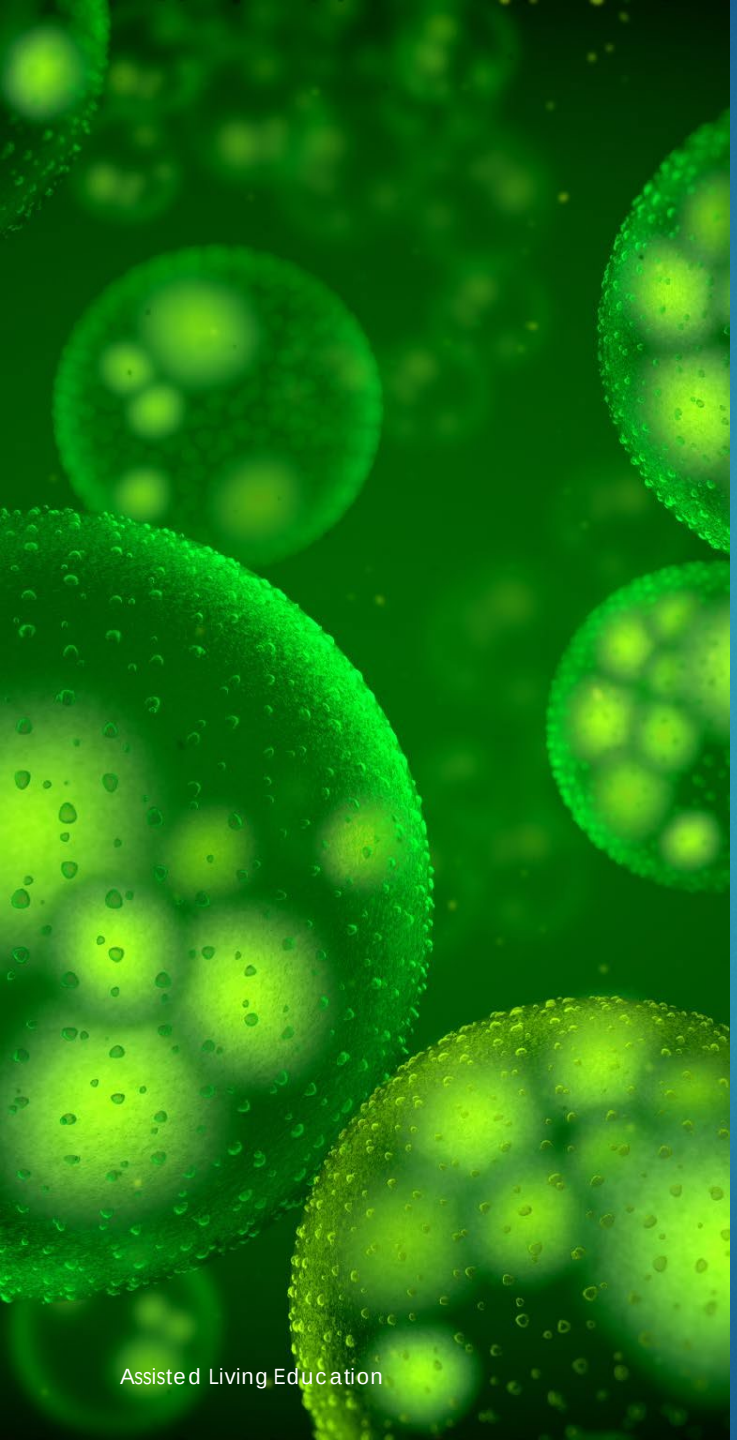
Direct contact with an infected wound or sore, or with personal-care items such as a razor, are common routes of transmission.



Staph Infection

Casual contact such as shaking hands or hugging does not pose a great risk for transmission *if there is no direct contact with the infected area*.

But because staph bacteria are so hardy, they can live on inanimate objects such as towels long enough to transfer to the next person who touches them. And heat may not kill them.



Staph Infection

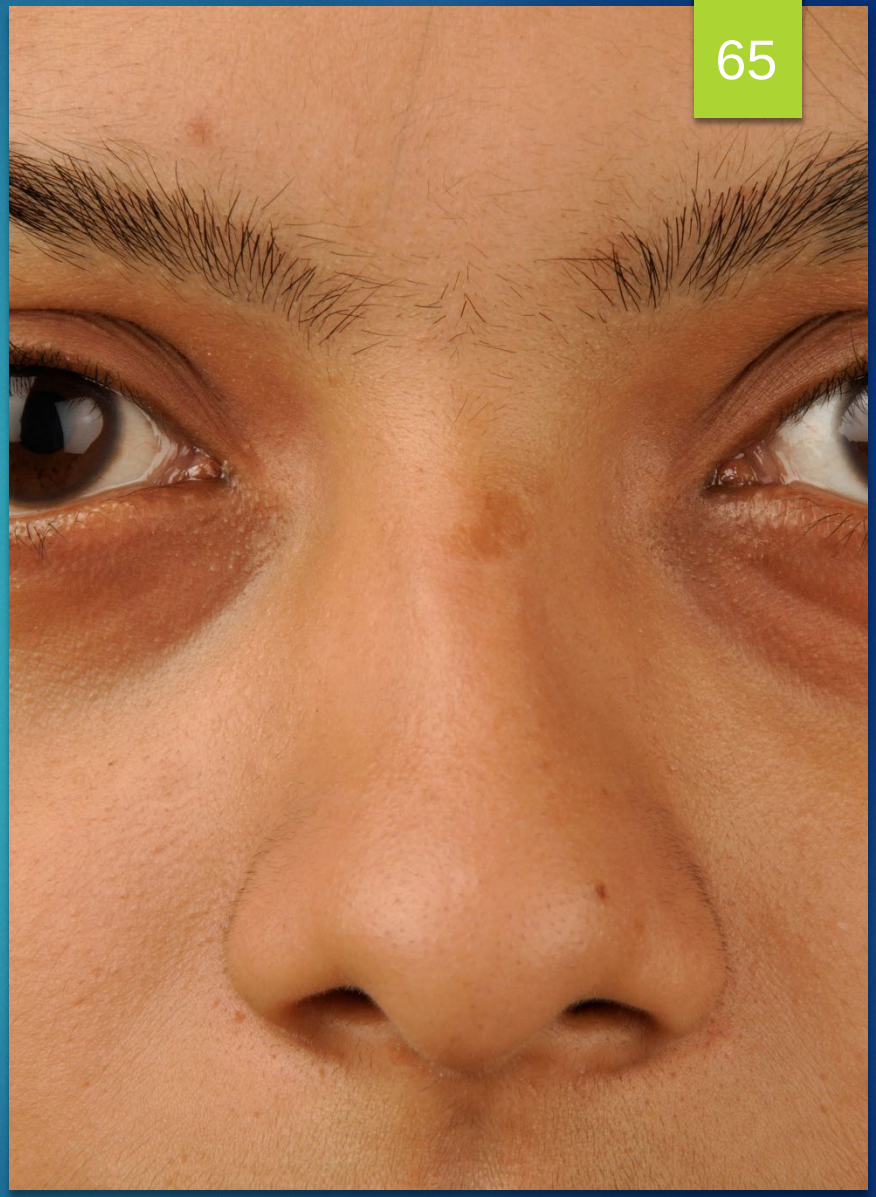
There are more than 30 species in the staph family of bacteria, and they can cause different kinds of illnesses — for example, one kind of staph can cause urinary tract infections.

But most staph infections are caused by the species Staphylococcus aureus (S. aureus).

Staph Infection

While 25% to 30% of people are colonized* in the nose with staph, less than 2% are colonized with MRSA.

*Colonized means that a person carries the organism/bacteria but shows no clinical signs or symptoms of infection. For Staph, the most common body site colonized is the nose.



Staph Infection

S. aureus most commonly causes skin infections like folliculitis, boils, impetigo and cellulitis that are limited to a small area of a person's skin.

S. aureus can also release toxins (poisons) that may lead to illnesses like food poisoning or toxic shock syndrome.





Staph Infection

Infections caused by *S. aureus* can occasionally become serious.

This happens when the bacteria move from a break in the skin into the bloodstream.

This can lead to infections in other parts of the body, such as the lungs, bones, joints, heart, blood and central nervous system.

Staph Infection

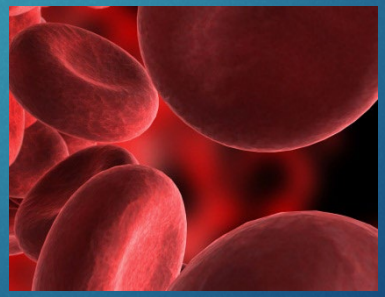
Symptoms of staph of the skin:

- abscess or boil with drainage or pus
- affected area may be red, swollen and painful



Symptoms of staph in the blood:

- high fevers
- chills
- low blood pressure



Staph Infection

Most common staph skin infection: **Cellulitis**

- an infection involving the skin and areas of tissue below the skin surface.
- most common on the legs but can affect any area of the body.
- begins as a small area of redness, pain, swelling, and warmth on the skin and as this area begins to spread, a person may feel feverish and ill.

Staph Infection – Cellulitis





Staph Infection

Staph can cause life-threatening diseases such as:

- pneumonia
- sepsis
- meningitis
- toxic shock syndrome

Staph Infection

How do I protect myself?



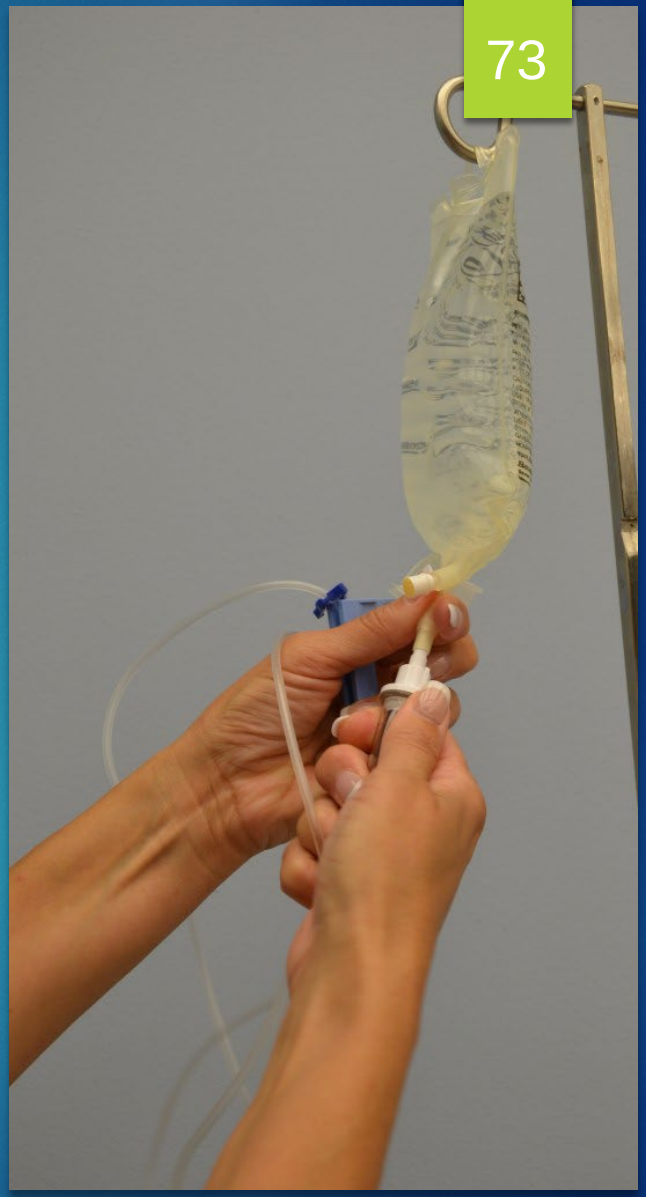
- Wear gloves
- Wash hands OFTEN!
- Shower/bathe daily
- Cover cuts or open wounds
- Do not share towels or clothing with someone who has staph
- Try to limit your time around a resident with staph

Staph Infection

How is it treated?

Antibiotics. Penicillin was the drug of choice until the 1980's, and then the bugs started to become resistant.

Intravenous antibiotics are used to treat serious and life-threatening infections.



Staph Infection

Why aren't antibiotics working anymore?

- Patients aren't finishing the entire course of the antibiotics and this allows some stronger bacteria (those with a higher tolerance to the antibiotic) to multiply and gradually acquire resistance.

- Bacteria can also gain resistance when antibiotics are given to patients who do not need them to begin with.

MRSA



Methicillin-resistant Staphylococcus aureus

MRSA





MRSA

The most feared type of staph infection because it can be antibiotic resistant.

It is resistant to: methicillin and other more common antibiotics such as penicillin and amoxicillin.

MRSA

Let's watch a video about MRSA:

https://www.youtube.com/watch?v=iGgobi91LOA



MRSA

The majority of MRSA infections are classified as CA-MRSA (community acquired) or HA-MRSA (hospital- or health-care-acquired).

In the community, most MRSA infections are skin infections.





MRSA

MRSA infections are transmitted from person to person by direct contact with the skin, clothing, or area (for example, sink, towel or bed) that had recent physical contact with a MRSA-infected person.

MRSA

At risk:

- ✓ Patients in hospitals
- ✓ Someone with open or broken skin
- ✓ Someone who has had surgery in the past year
- ✓ Someone with a compromised immune system
- ✓ Patients with catheters
- ✓ People who live in crowded living conditions

MRSA

Signs and symptoms of MRSA of the skin:

- Red bump or boil that may be full of pus (maybe it's a spider bite or a pimple???)
- Pain
- Swollen, tender and red skin lesion



MRSA



Signs and symptoms of hospital-acquired MRSA:

Fever	Cough
Chest pain	Muscle aches
Chills	Rash
General fatigue	Shortness of breath

MRSA



How do they know it Is MRSA??:

Culture of the boil/site

Blood culture

Urine culture

Sputum culture

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MRSA

OK, it's MRSA. Now what do we do?

If it's the skin infection:

- a nurse or doctor will drain the infection
- the wound will be covered
- antibiotics may be prescribed



MRSA

While most MRSA infections are resistant to penicillin, they may prescribe:

- Bactrim
- Tetracyclines such as Doxycycline
- Amoxicillin



MRSA

Protecting ourselves:

- Wash your hands!!!!
- Clean surfaces with detergent-based cleaners or Environmental Protection Agency (EPA)-registered disinfectants.
- Sanitize linens – hottest water setting and bleach, if possible

C. Diff

"Clostridium difficile"

A bacterium that can cause symptoms ranging from diarrhea to life-threatening inflammation of the colon.

Most commonly affects older adults in hospitals or in long term care facilities and typically occurs after use of antibiotic medications.

C. Diff

Let's watch a short video about this nasty bug.

https://www.youtube.com/watch?v=PUi4L0T6PFw

C. Diff

Each year, tens of thousands of people in the United States get sick from C. diff, including some otherwise healthy people who are not hospitalized or taking antibiotics.

The elderly and people with certain medical problems have the greatest chance of getting C. diff.



C. Diff



More at-risk people:

- hospital patients
- children
- 65+ years of age. (The risk of becoming infected with C. diff is 10 times greater for people age 65 and older compared with younger people.)
- someone with a serious underlying illness or a weakened immune system as a result of a medical condition or treatment (like a colon disease)

C. Diff

C. difficile bacteria can be found throughout the environment — in soil, air, water, and human and animal feces.

A small number of healthy people naturally carry the bacteria in their large intestine.



C. Diff

C. difficile bacteria are passed in feces and spread to food, surfaces and objects when people who are infected do not wash their hands thoroughly.

C. diff infection can spread from person-to-person on contaminated equipment and on the hands of doctors, nurses, other healthcare providers and visitors.

The bacteria produce hardy spores that can persist in a room for weeks or months.



C. Diff

The most common symptoms of a mild C. diff infection include:

- Watery diarrhea
- Fever
- Loss of appetite
- Nausea
- Stomach pain and tenderness

C. Diff

The most common symptoms of a severe C. diff infection include:

- Watery diarrhea 10-15 times a day
- Severe abdominal cramping
- Fever
- Nausea and vomiting
- Weight loss

C. Diff

- People in good health do not usually get sick from C. diff.
- The intestines contain millions of bacteria, many of which help protect the body from infection.
- When you take an antibiotic to treat an infection, the drug can destroy some of the normal, helpful bacteria as well as the bacteria causing the illness.
- Without enough healthy bacteria, C. diff can quickly grow out of control.

C. Diff

Bad news.....An aggressive strain of C. diff has emerged that produces far more toxins than other strains do.

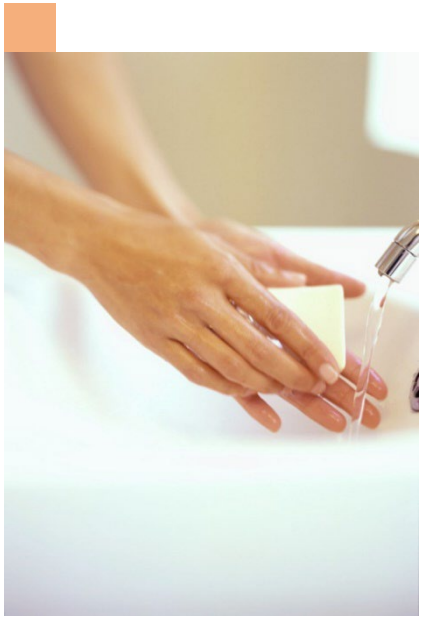
The new strain is more resistant to certain medications and has shown up in people who have not been in the hospital or taken antibiotics.

This strain of C. diff has caused several outbreaks of illness since 2000.

C. Diff

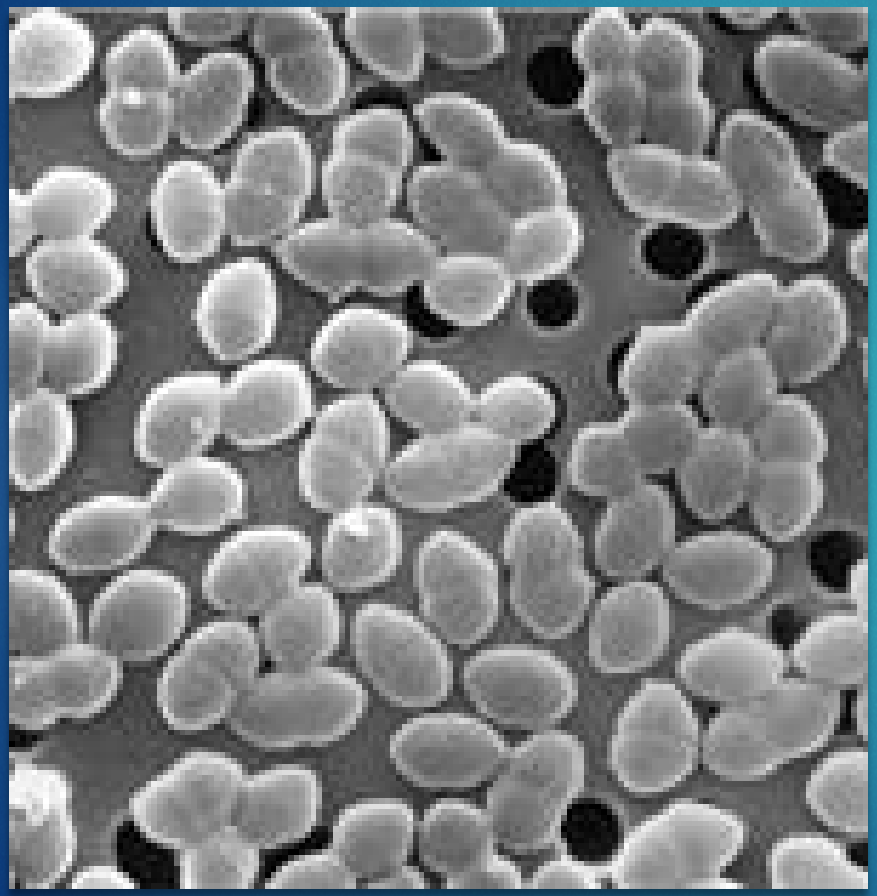
Prevention:

- Hand washing
- Wear gloves
- Thorough cleaning with bleach
- Avoid unnecessary use of antibiotics





VRE



Vancomycin-Resistant Enterococci

VRE

Enteroccocci are bacteria that are normally present in the human intestines and in the female genital tract and are often found in the environment.

These bacteria sometimes cause infection.

They are resistant to several antibiotics, but in the past, physicians could rely on the drug Vancomycin to effectively treat these infections. But.....

VRE

Vancomycin is an antibiotic that is used to treat some drug-resistant infections caused by enterococci.

In some instances, enterococci have become resistant to this drug and thus are called Vancomycin-resistant enterococci (VRE).



VRE

Once in the bloodstream, VRE can cause meningitis, pneumonia, or infection of a heart valve (called endocarditis).

VRE may also be introduced directly into an open sore or wound, causing a wound infection.

VRE

At risk:

- People who have been previously treated with the antibiotic Vancomycin or other antibiotics for long periods of time.
- People who are hospitalized, particularly when they receive antibiotic treatment for long periods of time.
- People with weakened immune systems such as patients in intensive care units.
- People who are colonized with VRE.
- People with cancer or diabetes (compromised immune system).

Assisted Living Education

VRE

How is it spread?

#1 – by caregivers who have contaminated hands.

VRE can also be spread directly to people after they touch surfaces that are contaminated with VRE.

VRE is not spread through the air by coughing or sneezing

VRE

- Signs and symptoms vary according to the site of infection.
- Invaded the blood stream: fever, fast heart rate and feel very sick (aka sepsis).
- Patients with urinary infections: burning with urination, back pain, or fever.

VRE

Treatments:

People with colonized VRE (bacteria are present but have no symptoms of an infection) do not need treatment.

Most VRE infections can be treated with antibiotics other than Vancomycin.

Assisted Living Education

VRE

Typical antibiotic treatments include:

- Amoxicillin
- Ampicillin
- Vancomycin





VRE

Reduce transmission by:

- washing hands
- not taking antibiotics when not needed
- covering sores, cuts, etc.
- wearing gloves
- Using alcohol-based disinfectants or simple household disinfectants

CRKP

The new super bug!

Stands for: *carbapenem-resistent Klebsiella pneumoniae*

After first surfacing in North Carolina, it has arrived on the West Coast. CRKP has now been reported in 36 US states.

Experts at the Center for Disease Control, CRKP has a 40% mortality rate for those who become infected*.

*Source: https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6041a2.htm

CRKP

CRKP is an enterobacterium, and is part of the same category as other killer bacteria like E. coli.

Most of the victims of CRKP have been women with an average age of 73.

Good news – your chance of getting it is remote…..for now….

CRKP



And that's good because....

CRKP is even scarier than MRSA because the new superbug is resistant to almost all antibiotics, while a few types of antibiotics still work on MRSA.

The one drug that treats this hardy bacteria is *Colistin*, which can cause severe kidney damage in some patients.

CRKP

How do you get it? You need to be exposed to the bacteria.

Who's most at risk?

- hospital or long-term healthcare facility patients
- elderly
- people on ventilators or have IV's

CRKP

Symptoms:

CRKP presents itself as a variety of illnesses, most commonly:

- Pneumonia
- Meningitis
- urinary tract infections
- wound (or surgical site)
- infections and blood infections

CRKP

Preventing transmission:

- wash hands with soap and water
- use gloves
- avoid sharing personal items
- shower after using gym equipment
- only take antibiotics when needed and finish the entire course



COVID-19

Coronavirus and COVID-19:

Coronaviruses are a type of virus. An identified coronavirus, SARS-CoV-2 (COVID-19), has caused a worldwide pandemic of respiratory illness and death around the world through person-to-person transmission.



COVID-19

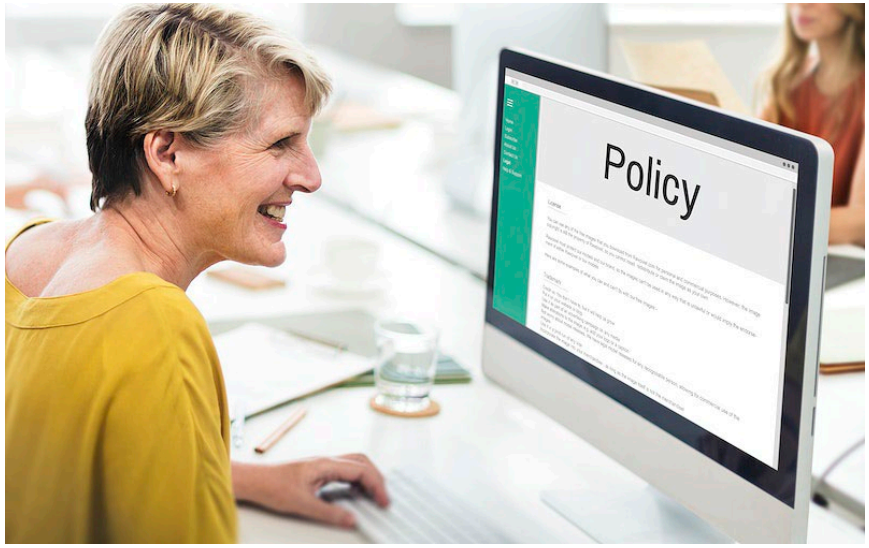
Per the CDC*, people with COVID-19 have had a wide range of symptoms reported – ranging from mild symptoms to severe illness.

Symptoms may appear 2-14 days after exposure to the virus. Anyone can have mild to severe symptoms. Possible symptoms include:

- Fever or chills
- Shortness of breath or difficulty breathing
- Muscle or body aches
- New loss of taste or smell
- Congestion or runny nose
- Diarrhea
- Cough
- Fatigue
- Headache
- Sore throat
- Nausea or vomiting

*Source: https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html

COVID-19



Due to the ever-changing and frequently updated DSS policies and procedures on COVID-19, the latest PIN will be reviewed in class and discussed.

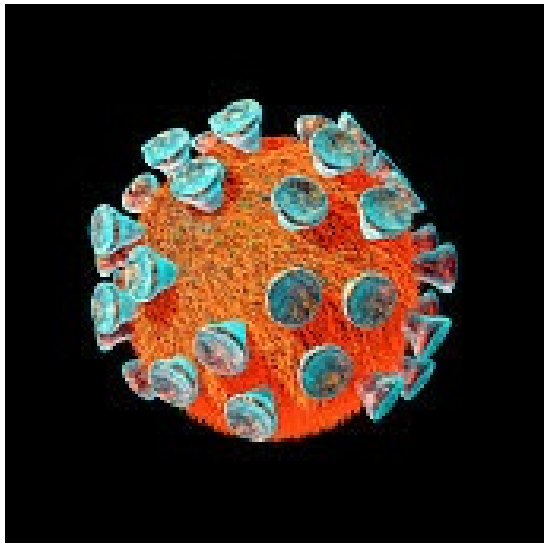
Norovirus

What comes to mind when you hear the word “norovirus”?

Hint:



Norovirus



The CDC estimates that noroviruses are responsible for more than half of all food-borne disease outbreaks each year and are the most common cause of diarrhea in adults and the second most common cause in children.*

*Source: https://www.cdc.gov/norovirus/index.html

Norovirus

Per WebMD, noroviruses are a group of viruses that cause inflammation of the stomach and large intestine lining (gastroenteritis); they are the leading cause of gastroenteritis in the U.S.

The norovirus was originally called the Norwalk virus after the town of Norwalk, Ohio, the location of the first confirmed outbreak in 1972.

Norovirus

Symptoms:

- Vomiting
- Watery diarrhea
- Stomach cramps
- Low-grade fever
- Chills
- Headache
- Muscle aches
- Fatigue



These symptoms are similar to the flu but they are <u>not</u> the influenza virus.



Norovirus

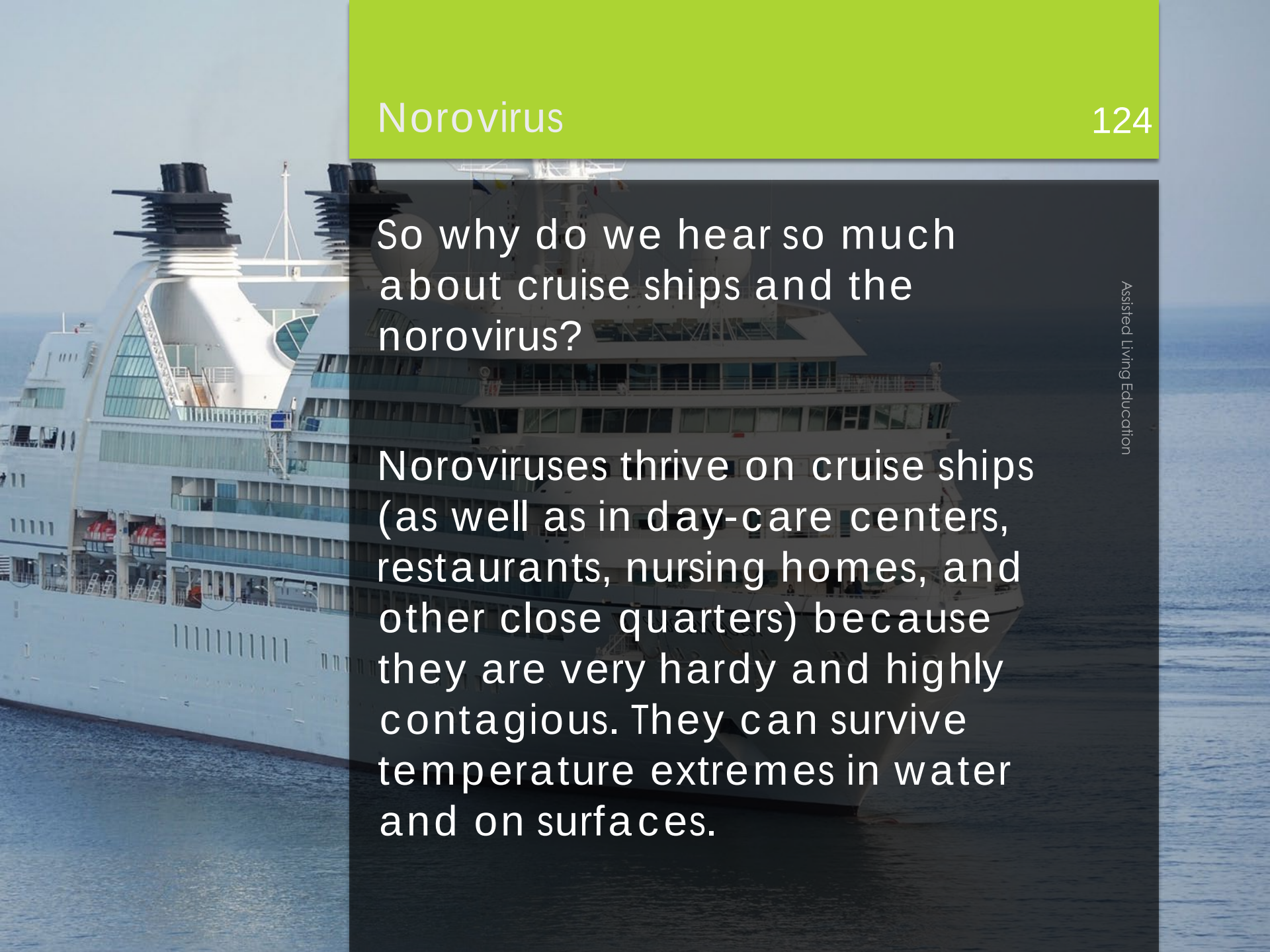
Noroviruses are sometimes called food poisoning, because they can be transmitted through food that has been contaminated with the virus……but they are not always the result of food contamination.

So how do you become infected with it?

Norovirus

According to WebMD, you can become infected with the norovirus by:

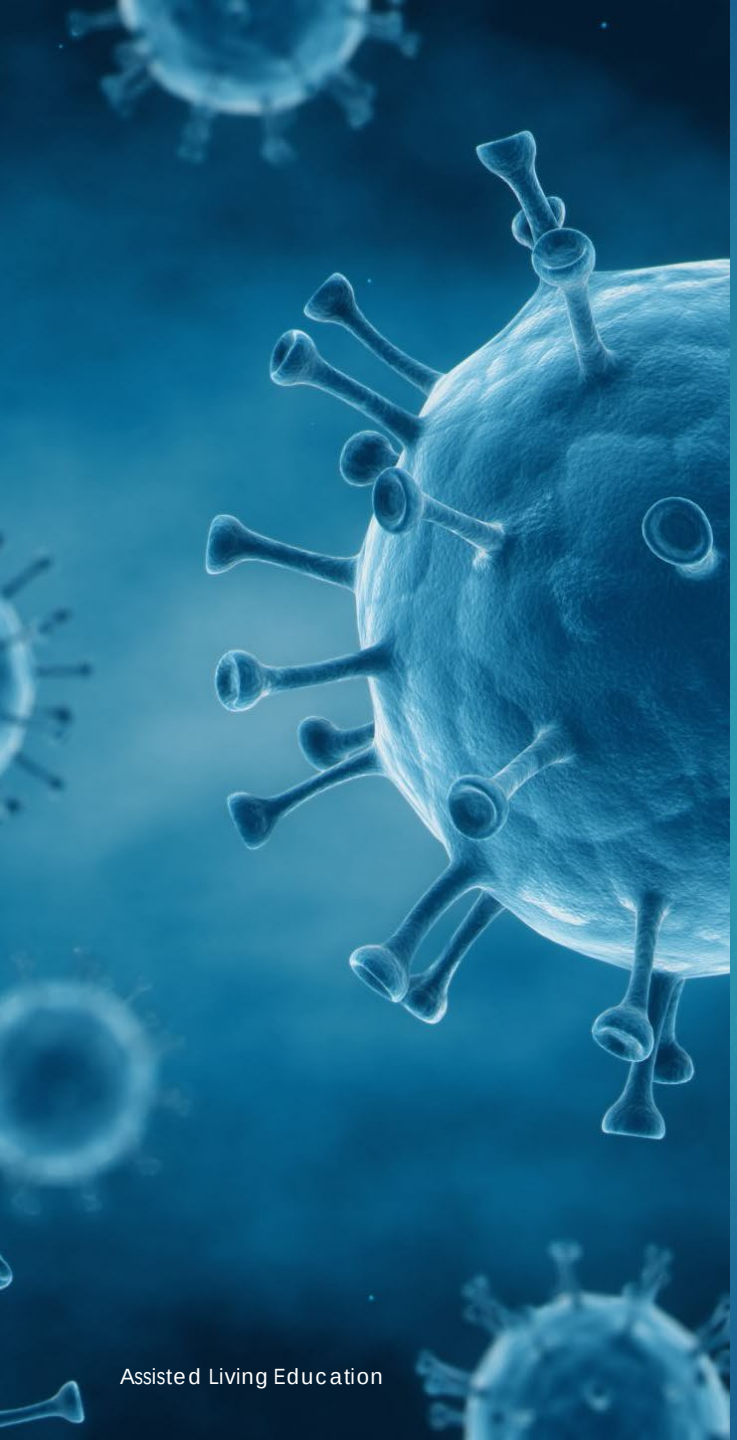
- Eating food or drinking liquids that have been contaminated;
  - Eating raw or undercooked oysters and raw fruits and vegetables have been known to carry the virus;
- Touching an object or surface that has been infected with the virus and then touching your nose, mouth, or eyes.



So why do we hear so much about cruise ships and the norovirus?

Noroviruses thrive on cruise ships (as well as in day-care centers, restaurants, nursing homes, and other close quarters) because they are very hardy and highly contagious. They can survive temperature extremes in water and on surfaces.

Assisted Living Education



Norovirus

- Once one person gets the virus, it quickly spreads to others - through shared food or utensils, by shaking hands or through other close contact.
- People who have a weakened immune system are particularly susceptible to catching noroviruses.

Norovirus

Treatment:

- Noroviruses, like other viruses, do not respond to antibiotics, which are designed to kill bacteria.
- No antiviral drug can treat noroviruses, but in healthy people the illness should go away on its own within a couple of days.
- Most people do not have any long-term problems from the virus.

Norovirus

Possible complications with our residents:

- Diarrhea can lead to dehydration which can lead to dizziness and falls;
- Vomiting can lead to malnutrition from not getting enough nutrients.

The good news is that the illness usually resolves itself within three days.



Norovirus

Prevention:

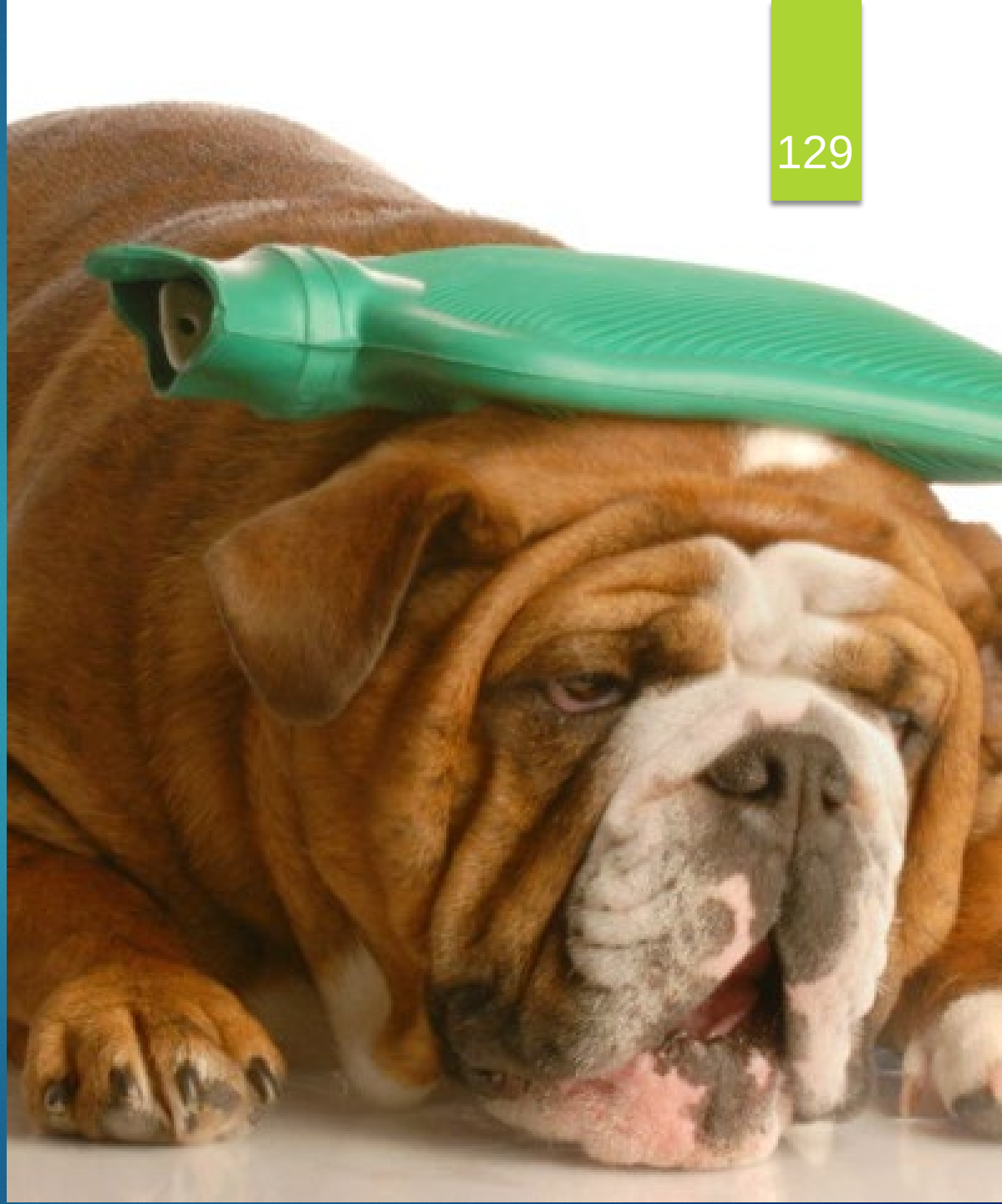
- Wash hands often.
- Dispose of contaminated incontinence products immediately.
- Wash raw fruits and vegetables thoroughly. Cook oysters and other shellfish before eating them.
- Clean and disinfect surfaces with a mixture of detergent and chlorine bleach after someone is sick.

Influenza

The Flu!

The flu is a contagious infection of the nose, throat, and lungs caused by the influenza virus.

Yes, it is contagious!



Influenza

Per the CDC*, nearly 8% of the US population is affected by flu annually.

Most get better within a week or two, but thousands become sick enough to be hospitalized.

Seasonal influenza leads to an estimated 650,000 deaths worldwide each year, according to the World Health Organization (WHO).*

*Source: https://www.forbes.com/health/body/flu-statistics/#:~:text=Flu%20Statistics%20in%20the%20U.S.,-New%20Mexico%20and&text=The%202021%2D2022%20flu%20season,5%2C000%20deaths%2C%20per%20the%20CDC.

Influenza

Signs and symptoms:

- Fever between 102 and 106
- Body aches
- Chills
- Nausea
- Vomiting
- Lack of energy
- Dry, hacking cough
- Sore throat



Influenza

The most common way to catch the flu is by breathing in droplets from coughs or sneezes.

It can also be spread when you touch a surface such as a faucet handle or phone that has the virus on it, and then touch your own mouth, nose, or eyes.



Influenza

Symptoms appear 1 - 7 days later.

Because the flu spreads through the air and is very contagious, it often strikes a community all at once, causing an epidemic illness.

Assisted Living Education

Influenza

Great, now you've got it in your community!

- Keep the resident away from other residents
- Urge them to rest
- Push the liquids
- Have them avoid alcohol and tobacco
- If the doctor prescribes antibiotics (which may not occur), make sure they take them on time and that they finish the entire course

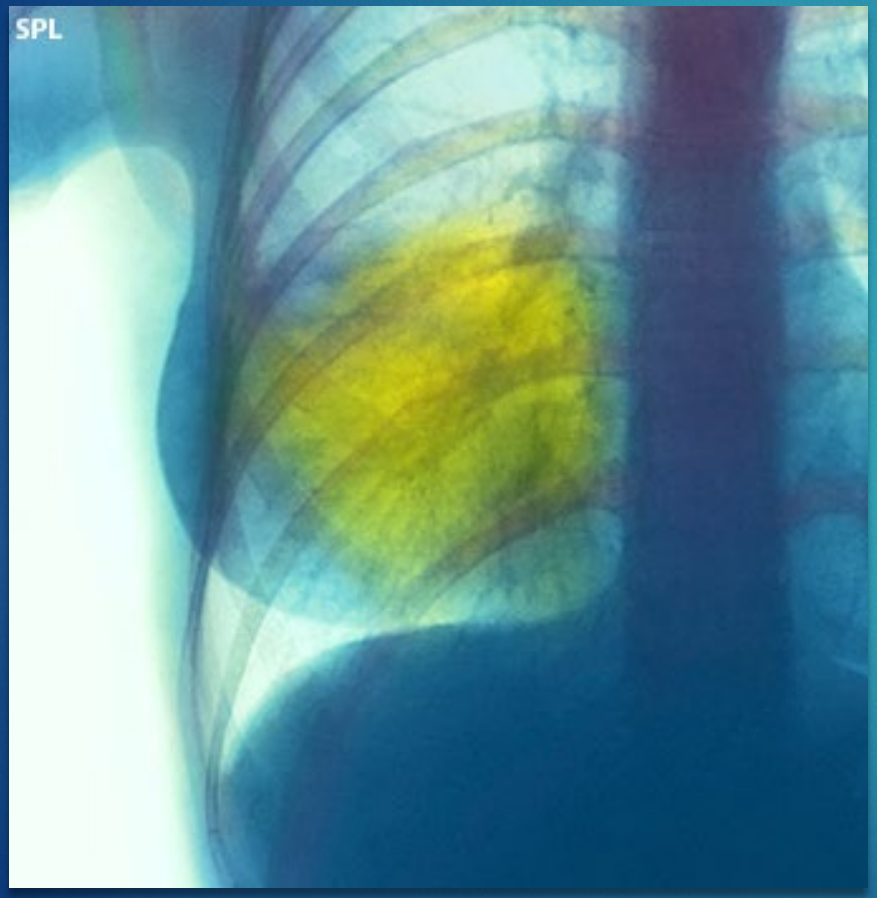
Influenza

Complications can include:

- Pneumonia
- Bronchitis
- Ear infections
- Sinus infections



Pneumonia



Per WebMD:

- Lung infection caused by a bacteria or virus.
- Symptoms can include a cough, fever, and a hard time breathing.
- Usually starts when breathing germs into the lungs; easier to contract after the flu or a cold.

Pneumonia

Per WebMD, the symptoms can include:

- Cough. Likely cough up mucus (sputum) from the lungs. Mucus may be rusty or green or tinged with blood.
- Fever.
- Fast breathing and feeling short of breath.
- Shaking and "teeth-chattering" chills.
- Chest pain that often feels worse when coughing or breathing in.
- Fast heartbeat.
- Feeling very tired or very weak.
- Nausea and vomiting.
- Diarrhea.

Pneumonia

When the symptoms are mild, it may be called "walking pneumonia."

Symptoms caused by viruses are the same as those caused by bacteria, but they may come on slowly and often are not as obvious or as bad.

Pneumonia

Seniors may have different, fewer, or milder symptoms. They may not have a fever or they may have a cough but not bring up mucus.

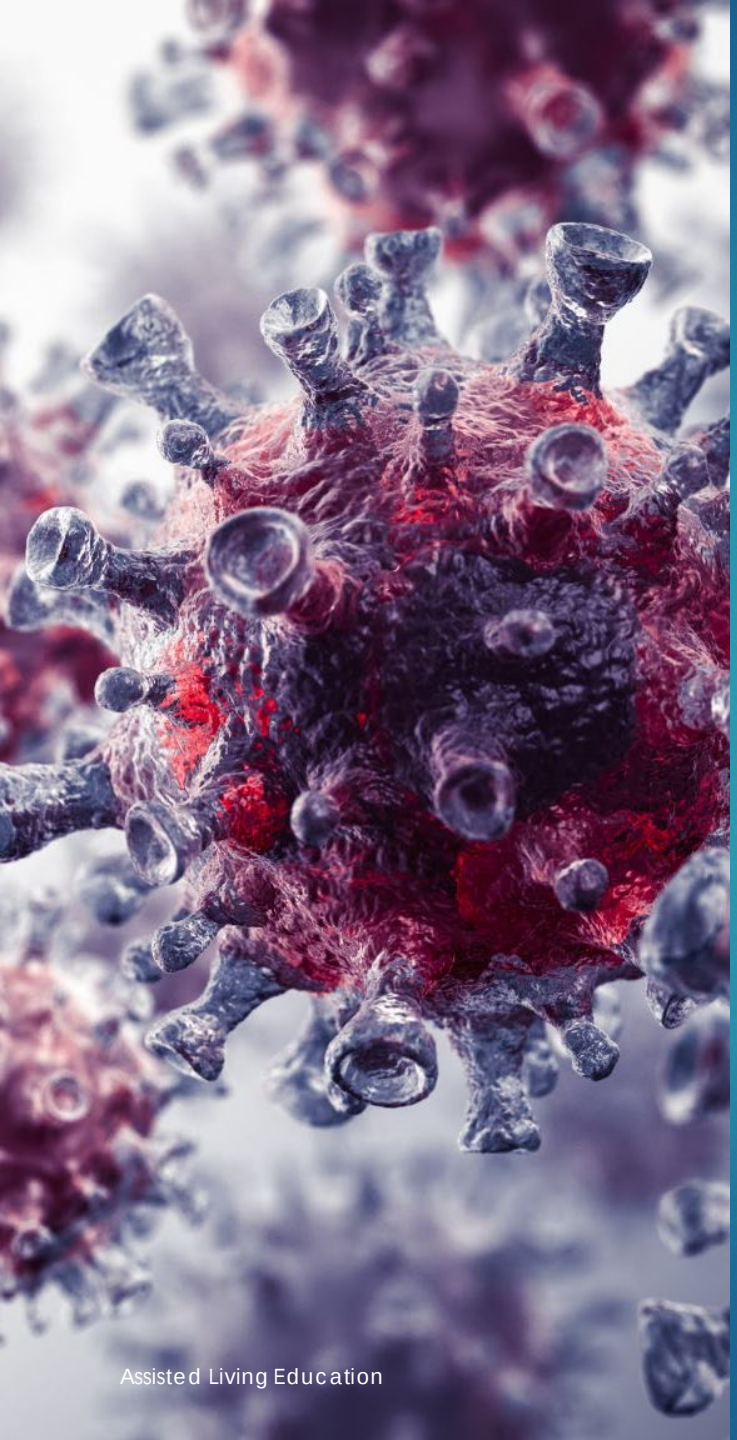
The main sign of pneumonia in seniors may be a change in how well they think. Confusion or delirium is common. Or, if they already have a lung disease, like pulmonary fibrosis, that disease may get worse.



Pneumonia

Pneumonia caused by bacteria can be treated with antibiotics; pneumonia caused by a virus usually cannot be treated with antibiotics.

Encourage the resident to rest, drink plenty of liquids, and not smoke.



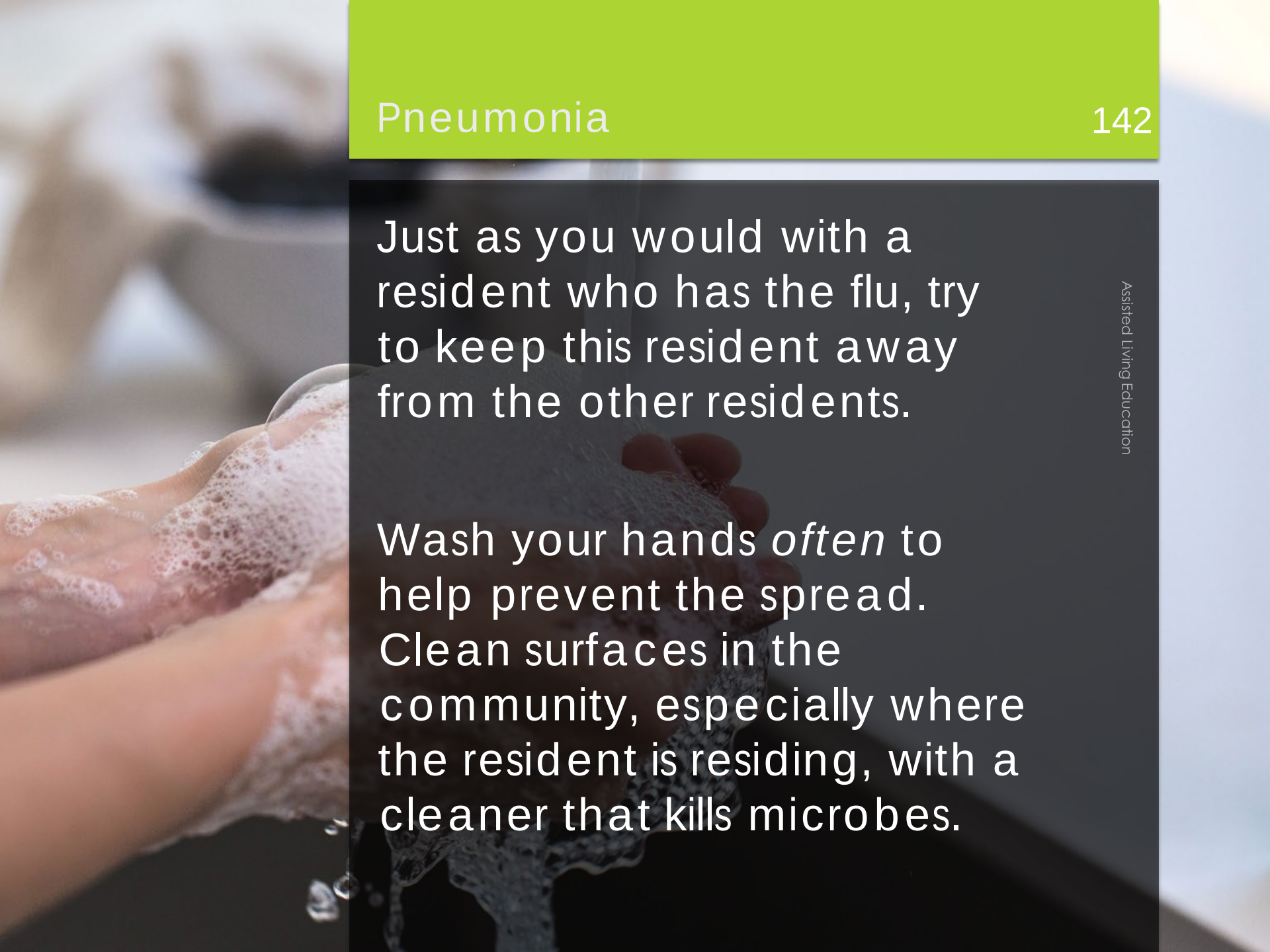
Pneumonia

Is pneumonia contagious?

Per MedicineNet.com*, because pneumonia is caused by microbes, pneumonia can be contagious. How?

Bacteria or viruses are expelled when an infected person coughs to produce droplets. These expelled droplets contain the bacteria or virus that causes the pneumonia. These droplets contaminate the mouth or breathing tract of another individual to eventually infect their lungs.

*Source: https://www.medicinenet.com/pneumonia_facts/article.htm



Pneumonia

Just as you would with a resident who has the flu, try to keep this resident away from the other residents.

Wash your hands *often* to help prevent the spread. Clean surfaces in the community, especially where the resident is residing, with a cleaner that kills microbes.

Assisted Living Education



Foodborne Illnesses



Foodborne Illnesses

The Center for Disease Control and Prevention* states that each year, 1 in 6 Americans gets sick by consuming contaminated foods or beverages.

Many different disease-causing microbes, or pathogens, can contaminate foods, so there are many different foodborne infections.

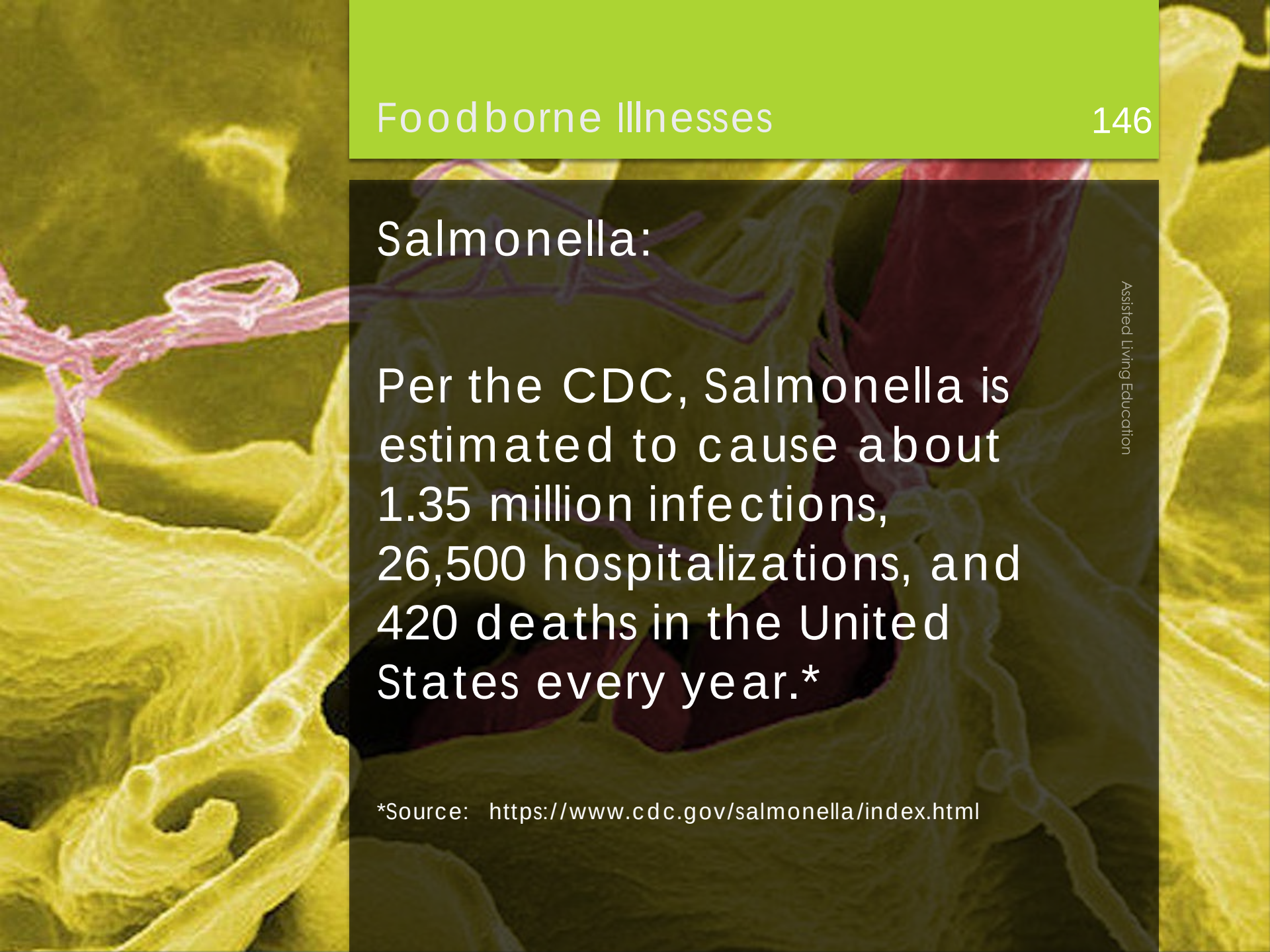
*Source: https://dchealth.dc.gov/service/foodborne-illness-surveillance#:~:text=According%20to%20data%20from%20the,are%20hospitalized%2C%20and%203%2C000%20die

Foodborne Illnesses

Per the CDC, the top 5 pathogens causing illness, hospitalization, and death are*:

1. Norovirus
2. Salmonella
3. Clostridium perfringens
4. Campylobacter
5. Staphylococcus aureus

*Source: https://www.cdc.gov/foodborneburden/2011-foodborne-estimates.html



Salmonella:

Per the CDC, Salmonella is estimated to cause about 1.35 million infections, 26,500 hospitalizations, and 420 deaths in the United States every year.*

*Source: https://www.cdc.gov/salmonella/index.html

Assisted Living Education



Foodborne Illnesses

Salmonella:

- It is a bacteria.
- Most people infected with Salmonella develop diarrhea, fever, and abdominal cramps between 12 and 72 hours after infection.
- The illness usually lasts 4 to 7 days, and most individuals recover without treatment.

Foodborne Illnesses

Salmonella:

Unfortunately, for some, the diarrhea can become so severe that it leads to dehydration.

Seniors and people with compromised immune systems are more at risk.



Foodborne Illnesses

How do you get salmonella?

Salmonella bacteria typically live in animal and human intestines and are shed through feces. Humans become infected most frequently through contaminated water or food, caused by eating raw or undercooked meat, poultry, eggs or egg products.

Salmonella treatment:

- Antibiotics are not generally prescribed; in fact, in some cases ,it can prolong the sickness.
- Because salmonella can be dehydrating, treatment focuses on replacing fluids and electrolytes. Severe cases may require hospitalization and IV fluids.

Foodborne Illnesses

Clostridium perfringens:

According to the CDC*, foods cooked in large batches and held at unsafe temperatures are typically involved in outbreaks of C. perfringens food poisoning. Specific foods commonly linked to C. perfringens food poisoning include

- Poultry, such as turkey and chicken
- Meat, such as beef and pork
- Gravy

*Source: https://www.cdc.gov/foodsafety/diseases/clostridium-perfringens.html



Clostridium perfringens:

- Meat products such as stews, casseroles, and gravy are the most common sources of illness from C. perfringens.
- Most outbreaks come from food whose temperature is poorly controlled.
- If food is kept between 70 and 140 F, it is likely to grow Clostridium perfringens bacteria.

Foodborne Illnesses

Signs and symptoms:

- People generally experience symptoms 6-24 hours after consuming the bacteria or toxins.
- Clostridium perfringens toxins cause abdominal pain and stomach cramps, followed by diarrhea. Nausea is also a common symptom.
- Fever and vomiting are not normally symptoms of poisoning by Clostridium perfringens toxins.

Foodborne Illnesses



Preventing a Clostridium perfringen infection:

1. Cook foods containing meat thoroughly.
2. If keeping foods out, make sure they maintain a temperature of 140 F.
3. Reheat foods to at least 165 F.

Foodborne Illnesses

Campylobacter:

Per the CDC*, this bacteria causes diarrhea, cramping, abdominal pain, and fever within two to five days after exposure to the organism. The diarrhea may be bloody and can be accompanied by nausea and vomiting. The illness typically lasts about one week.

*Source: https://www.cdc.gov/campylobacter/index.html

Foodborne Illnesses

Treatment:

- Almost all persons infected with Campylobacter recover without any specific treatment.
- Patients should drink extra fluids as long as the diarrhea lasts.
- Antimicrobial therapy is warranted only for patients with severe disease or those at high risk for severe disease, such as those with immune systems severely weakened from medications or other illnesses.



Foodborne Illnesses

Per the CDC*, an estimated 1,600 people get listeriosis each year, and about 260 die. What is listeriosis?

The listeria bacteria is found in soil and water and some animals, including poultry and cattle. It can be present in raw milk and foods made from raw milk.

*Source: https://www.google.com/search?q=listeria+outbreak+statistics&rlz=1C1CHBF_enUS819US819&oq=listeria+outbreak+statistics&aqs=chrome..69i57j0i390i650l4.3845j0j4&sourceid=chrome&ie=UTF-8

Foodborne Illnesses

Listeria can be found in:

- Ready-to-eat deli meats and hot dogs
- Refrigerated pâtés or meat spreads
- Unpasteurized (raw) milk and dairy products
- Soft cheese made with unpasteurized milk, such as queso fresco, Feta, Brie, Camembert
- Refrigerated smoked seafood
- Raw sprouts

Assisted Living Education

Foodborne Illnesses

Listeria symptoms include:

Fever, stiff neck, confusion, weakness, vomiting, sometimes preceded by diarrhea

The duration of the illness is generally 3-7 days.

Foodborne Illnesses

ServSafe
National Restaurant Association

Registered ServSafe Proctor
& Certified ServSafe Instructor

Due to the type of clients we are serving, and their delicate immune systems, it is imperative that food is processed and served in a healthy and safe manner.

If you are unclear on food safety, take the ServSafe course.



DSS Regulations for RCFE's

Title 22 for RCFE's



Newly added Section to Title 22:

87470 INFECTION CONTROL REQUIREMENTS

Added pages 142.2 – 142.6

Describes required infection control practices

Title 22 for RCFE's

Infection Control Requirements Summary:

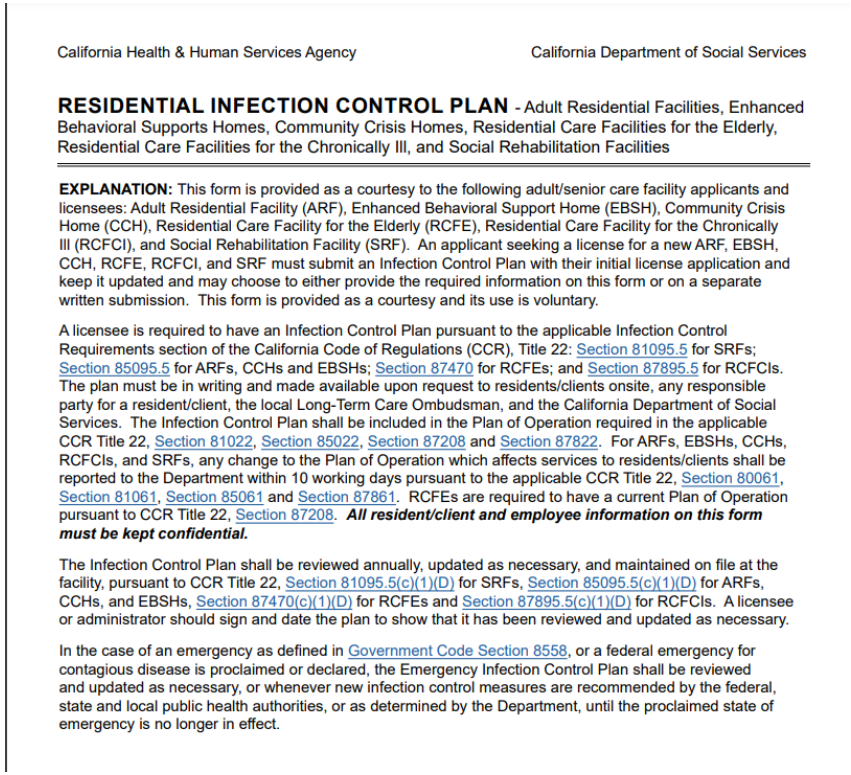
- Train staff on proper handwashing/hand hygiene
- Implement environmental cleaning and disinfection policies and procedures
- Implement policies and procedures for staff who assist residents with injectable mediations
- Train staff on proper use of gloves
- Train staff and volunteers on proper respiratory etiquette (i.e., using tissue)
- Train staff on assisting residents with contagious diseases, including the use of PPE's
- Prepare an Infection Control Plan and designate an Infection Control Lead for the facility

Title 22 for RCFE's

Infection Control Plan Summary:

- Must be included in the facility's Plan of Operation
- Identifies an Infection Control Lead (staff person)
- Outline of infection control practices in the facility
- Includes description of initial training for new facility staff along with ongoing training
- Includes an Emergency Infection Control Plan for a federal contagious disease proclamation or declaration
- Updated at least annually by the Licensee

Title 22 for RCFE's



California Health & Human Services Agency — California Department of Social Services

RESIDENTIAL INFECTION CONTROL PLAN - Adult Residential Facilities, Enhanced Behavioral Supports Homes, Community Crisis Homes, Residential Care Facilities for the Elderly, Residential Care Facilities for the Chronically Ill, and Social Rehabilitation Facilities

EXPLANATION: This form is provided as a courtesy to the following adult/senior care facility applicants and licensees: Adult Residential Facility (ARF), Enhanced Behavioral Support Home (EBSH), Community Crisis Home (CCH), Residential Care Facility for the Elderly (RCFE), Residential Care Facility for the Chronically Ill (RCFCI), and Social Rehabilitation Facility (SRF). An applicant seeking a license for a new ARF, EBSH, CCH, RCFE, RCFCI, and SRF must submit an Infection Control Plan with their initial license application and keep it updated and may choose to either provide the required information on this form or on a separate written submission. This form is provided as a courtesy and its use is voluntary.

A licensee is required to have an Infection Control Plan pursuant to the applicable Infection Control Requirements section of the California Code of Regulations (CCR), Title 22: Section 81095.5 for SRFs; Section 85095.5 for ARFs, CCHs and EBSHs; Section 87470 for RCFEs; and Section 87895.5 for RCFCIs. The plan must be in writing and made available upon request to residents/clients onsite, any responsible party for a resident/client, the local Long-Term Care Ombudsman, and the California Department of Social Services. The Infection Control Plan shall be included in the Plan of Operation required in the applicable CCR Title 22, Section 81022, Section 85022, Section 87208 and Section 87822. For ARFs, EBSHs, CCHs, RCFCIs, and SRFs, any change to the Plan of Operation which affects services to residents/clients shall be reported to the Department within 10 working days pursuant to the applicable CCR Title 22, Section 80061, Section 81061, Section 85061 and Section 87861. RCFEs are required to have a current Plan of Operation pursuant to CCR Title 22, Section 87208. ***All resident/client and employee information on this form must be kept confidential.***

The Infection Control Plan shall be reviewed annually, updated as necessary, and maintained on file at the facility, pursuant to CCR Title 22, Section 81095.5(c)(1)(D) for SRFs, Section 85095.5(c)(1)(D) for ARFs, CCHs, and EBSHs, Section 87470(c)(1)(D) for RCFEs and Section 87895.5(c)(1)(D) for RCFCIs. A licensee or administrator should sign and date the plan to show that it has been reviewed and updated as necessary.

In the case of an emergency as defined in Government Code Section 8558, or a federal emergency for contagious disease is proclaimed or declared, the Emergency Infection Control Plan shall be reviewed and updated as necessary, or whenever new infection control measures are recommended by the federal, state and local public health authorities, or as determined by the Department, until the proclaimed state of emergency is no longer in effect.

Infection Control Plan Summary:

The LIC 9282 form can be used to create your facility's Infection Control Plan. This can be used for both RCFE's and ARF's.

RCFE Regulations

Title 22, Section 87211 - Occurrences, such as **epidemic outbreaks**, poisonings, catastrophes or major accidents which threaten the welfare, safety or health of residents, personnel or visitors, shall be reported within **24 hours** either by telephone or facsimile to the licensing agency and to the local health officer when appropriate.

RCFE Regulations



RCFE's are now allowed to accept or retain residents with Hepatitis C!

Section 87609: ALLOWABLE HEALTH CONDITIONS

RCFE Regulations – Hepatitis C

Requirements:

1. Sufficient staff that is competent to provide services necessary to meet the residents;
2. Direct care staff are trained to meet health and safety requirements and any other procedures recommended by the appropriately skilled professional for the protection of the resident who has the virus, and other residents and staff;

RCFE Regulations – Hepatitis C

Requirements (cont'd):

3. Proof that you have trained your staff on universal precautions;
4. Teach staff on how Hep C is transmitted; and
5. Use a sharps container, if needed.

RCFE Regulations

Section 87615 - PROHIBITED HEALTH CONDITIONS for RCFE's

If a resident is diagnosed with a methicillin-resistant staphylococcus aureus or vancomycin-resistant enterococci infection, the resident must be relocated elsewhere, such as to an acute care hospital or a skilled nursing facility, until the infection is cleared……

RCFE Regulations

Section 87615(a)(4): Sometimes a resident may be known to be colonized but not infected with an antibiotic resistant bacterium. Colonization without infection is not prohibited in facilities, and so no exception is required to retain a resident who is colonized without infection.

However, colonized residents can transmit infection to others, and, therefore, universal precautions should be practiced with any resident who is known to be colonized with an antibiotic-resistant bacterium.



DSS Regulations for ARF's

Additions to Title 22

Section 85092.7 Staph or Other Serious, Communicable Infections (page 32.1 added in February, 2022)

States that ARF's may accept or retain a client who has a staph or other serious communicable infection if this section of the regulations are met, such as proper infection control requirements are met, etc.

Assisted Living Education

Additions to Title 22

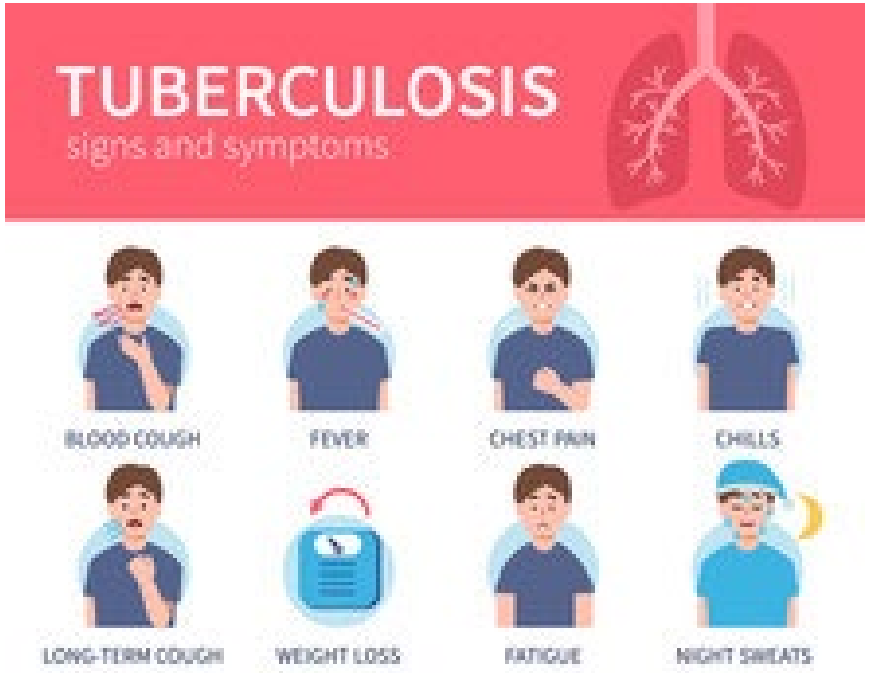
- Effective July 1, 2023, Section 85095.5 was added (pages 32.2-32.6)
- These Infection Control Requirements are the same as the RCFE requirements (reviewed previously in this course)



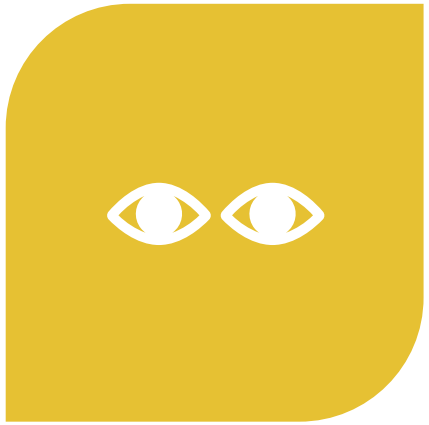
ARF Regulations

Title 22, Section 85075.1(m):

Clients with active, communicable tuberculosis, or any condition or care requirements which would require the facility to be licensed as a health facility as defined by Section 1202 and Section 1250 of the Health and Safety Code remain prohibited from being accepted or retained in the facility.



ARF Regulations



85075.4(D) OBSERVATION OF THE CLIENT



A CLIENT SUSPECTED OF HAVING A CONTAGIOUS OR INFECTIOUS DISEASE SHALL BE ISOLATED AND A PHYSICIAN CONTACTED TO DETERMINE SUITABILITY OF THE CLIENT'S RETENTION IN THE FACILITY.



OSHA Regulations for all facilities

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OSHA Regulations

*All** facilities are required to have a *written* Injury and Illness Prevention Plan. It is known as an "IIPP".

This Plan includes information on:

- Safety communication with employees;
- Safe work practices for each department;
- Scheduled inspections for safety;
- Accident investigations and procedures; and
- Procedures for correcting unsafe/unhealthy conditions.

*See following slide

OSHA Regulations

*A written IIPP is required for ALL employers.

For 1-9 employees, you are allowed to verbalize job hazards to your employees – *but you still need an IIPP*.



Injury and Illness Prevention Plan

Your IIPP must include and address:

- Management commitment/assignment of responsibilities;
- Safety communications system with employees;
- System for assuring employee compliance with safe work practices;
- Scheduled inspections/evaluation system;
- Accident investigation;
- Procedures for correcting unsafe/ unhealthy conditions;
- Safety and health training and instruction; and
- Recordkeeping and documentation.

OSHA Regulations

All facilities *must* also have an Exposure Control Plan and a Hazard Communication Plan.

The purpose of these Plans is to inform staff on the policies and procedures (according to OSHA and your facility) in case of bloodborne pathogen exposure.

Exposure Control Plan



This must be reviewed with all new employees and annually, thereafter.

Make sure your employees know where your Plan is kept.

Sources

Department of Social Services Website for: RCFE and ARF Title 22, Health and Safety Codes and PIN's

Centers for Disease Control and Prevention

WebMD.com

MedicineNet.com

Forbes.com

World Health Organization

Association for Professionals in Infection Control and Epidemiology

MedlinePlus.gov

MayoClinic.org

PennMedicine.org

US Department of Labor, Occupational Safety and Health Administration

Conclusion

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WHERE EXPERTISE AND EDUCATION MEET

Thank you for attending our Course. We look forward to seeing you again!

The Assisted Living Education Staff