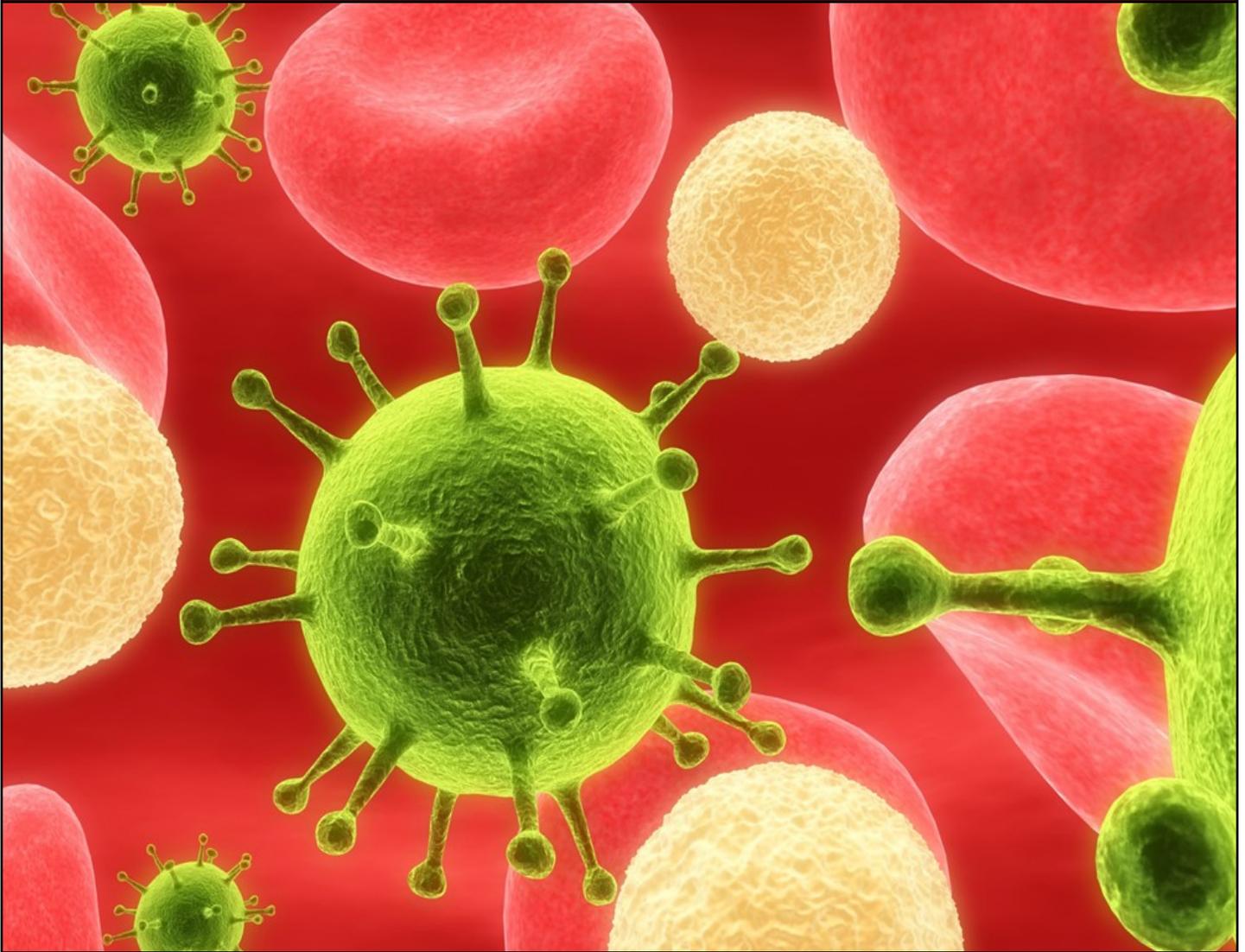


# Standard Precautions and Infection Control



**PEOPLECARE**  
HEALTH SERVICES

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# Standard Precautions and Infection Control

As scientists learn more and more about what causes disease, they try harder to control the spread of infection. For example, one event that triggered new infection control guidelines was the outbreak of HIV/AIDS. Because of this disease, the US Centers for Disease Control (the CDC) developed *Universal Precautions* in 1985. In 1996, the CDC took another look at universal precautions and decided to make some changes. They wanted to be sure that their guidelines made sense and were easy to follow. As a result, healthcare workers have infection control guidelines called *Standard Precautions* and *Additional Precautions*.

## What Are Standard Precautions

Standard Precautions are basic infection control guidelines for you to follow as you perform your daily work. These guidelines for the spread of infection include: washing your hands properly, using protective barriers like gloves and masks and handling infectious waste material properly.

## What Are Additional Precautions

Additional Precautions are guidelines for protecting yourself and/or clients who need more than just basic infection control. These extra precautions are divided into categories according to how a disease is spread: *airborne transmission*, *droplet transmission* and *contact transmission*.

## Facts About How Infections Are Spread

Infections are spread by contact with body fluids (blood, mucous, etc...) of an infected person. Among healthcare workers, infections are spread most often because workers do not wash their hands often enough and/or do not wash them correctly.

## **PROPER HAND WASHING IS THE SINGLE MOST IMPORTANT METHOD TO PREVENT THE SPREAD OF INFECTION**

Studies have shown that most healthcare workers think they wash their hands more often than they really do. For example, for one study, doctors were asked how often they washed their hands between clients. Most answered that they washed their hands at least 57% of the time. However, when secretly watched, some only washed their hands 9% of the time! It is extremely important to remember to follow basic Standard Precautions. Infections are spread when healthcare workers do not wash their hands enough using the correct hand-washing methods and instead let the use of gloves take the place of hand-washing. Infections can also spread when equipment has not been cleaned properly and barriers between clients are not changed.

Remember that gloves are designed to protect yourself and the client. If you have dirty hands when you pick up a pair of gloves, you will contaminate them—and your client. Wash your hands before you put on gloves! Also, do not touch your face during client care. Your eyes, nose and mouth are places where germs can enter your body.

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If you ever feel like infection-control procedures are wasting too much of your time, consider these facts:

- At least half of all cases of food poisoning are caused by people not washing their hands before preparing food
- Studies show that over 1.5 million nursing home residents catch an infection every year from germs spread by *healthcare workers*' hands
- Every year, thousands of healthcare workers catch a cold, flu or other infection from their clients because they fail to follow proper infection control procedures



Remember— the best way to prevent the spread of infection is to use Standard Precautions with every client!

## Standard Precautions for Bloodborne Transmission

Bloodborne transmission means that a disease is spread when the blood of an infected person reaches the bloodstream of another person. Standard Precautions are what you should do to practice basic infection control against bloodborne disease. This includes things like washing your hands before and after client care and wearing gloves when you might come in contact with body fluids.

Key Points To Remember:

- Standard Precautions apply to all your clients, no matter what their diagnosis—even if they don't seem sick!
- Hand washing is the most important thing you can do to prevent the spread of infection
- Wearing gloves does *not* take the place of hand washing
- If you don't change your gloves in between clients, you may be spreading infections to *all* your clients
- Take off dirty gloves as soon as possible

Just think how many germs you could spread if you empty a bed pan then touch the skin, the toilet, the light switch, the doorknob, your pen and clipboard and the client—with those same dirty gloves!

Diseases caused by Bloodborne  
Transmission include:  
HIV/AIDS and Hepatitis C.

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## Proper Handwashing Instructions:

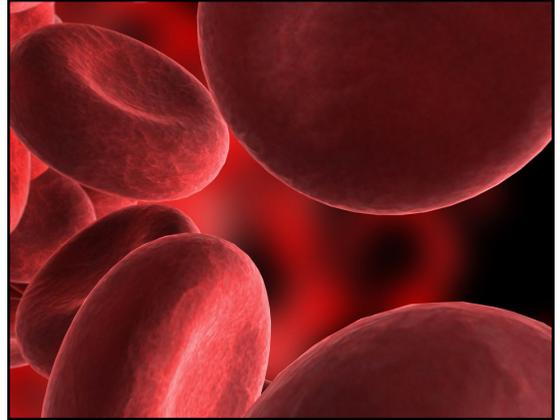
1. Run your hands under warm water, apply soap liberally
2. Lather by rubbing your hands together, covering all surfaces, between fingers and around fingernails, rub hands together for **at least 20 seconds or longer**
3. Sing the “alphabet” or “happy birthday” song twice in your head to ensure it is enough time
4. Rinse your hands thoroughly with warm water and remove any residual soap/germs are rinsed
5. With water still running, grab paper towels to dry hands, then use the paper towels to shut off the faucet



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**You should use Standard Precautions with every client and when you have contact with:**

- Blood
- All other body fluids, except sweat—even if you don't see blood
- Broken skin
- Mucous membranes, like the inside of the eyelids, nose or mouth
- Dried blood and body fluids



**Standard Precautions include:**

- Washing your hands after you touch blood, body fluids or contaminated items—even if you were wearing gloves!
- Washing your hands whenever you remove a pair of gloves
- Washing your hands between clients
- Washing hands between tasks performed on different body sites on the same client
- Putting on clean gloves before you touch a client's broken skin or mucous membranes
- Changing gloves between tasks and between clients
- Removing a dirty gown as soon as possible and then washing your hands
- Wearing a mask and eye protection to protect your mucous membranes if you might get splashed by blood or body fluids (if you are emptying a foley or other drain)
- Cleaning up spills and client care areas promptly
- Removing any contaminated items and disposing of them immediately
- Wear scrubs, and remove any soiled clothing immediately

## **Additional Precautions for Airborne Transmission**

Some diseases are known to be spread by *airborne transmission*. This means that the germs that cause these diseases are so tiny that they can float in the air for long periods of time. Some disease spread by airborne transmission include: tuberculosis, measles, chickenpox and shingles.

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These germs can also “catch a ride” on dust particles, traveling wherever the dust particles go. So, keep in mind:

- Germs that are spread by airborne transmission can travel across a room or even farther
- Electric fans, furnaces and other similar appliances can further spread airborne germs
- Airborne diseases are often very contagious since the germs can travel a long way and be breathed in by many people
- It can be more difficult to control the spread of airborne diseases. For example, to control the spread of tuberculosis, it’s not enough to wear a mask. You have to wear a special respirator mask
- Special air ventilation must be used to prevent the spread of airborne disease

These precautions are used *in addition to* Standard Precautions for clients who have (or might have) airborne infections. It’s important to know if you are immune to certain airborne infections like measles or chickenpox. If you are, you can work with infected clients without worrying about getting the disease yourself. You still have to follow all infection control precautions ordered for that client.

## **For Clients on Airborne Precautions, You May Have To:**

- Keep the door to their room closed
- Wear a special respirator mask when you work with clients who have (or might have) TB
- Encourage them to cover their nose and mouth when sneezing and coughing
- Put surgical masks on these clients if they need to be around uninfected people for a short period of time
- If the client leaves the home, cover the person’s mouth and nose with a mask to reduce the risk of spreading it to others. Avoid going into public as much as possible



# Standard Precautions and Infection Control

## Additional Precautions for Droplet Transmission

Some diseases are spread through *droplet transmission*. This means that these germs fly through the air, but are **too heavy** to float. They drop quickly—and so it's called “droplet” transmission. Because droplets are too heavy to float, they usually don't travel more than 3 feet. These diseases are commonly spread during coughing, sneezing and talking. Some diseases spread by droplet transmission include: mumps, rubella, whooping cough, flu, pneumonia, types of meningitis, strep throat, and the common cold.

Remember that droplets can only travel a short distance, but the droplets will settle onto surfaces such as table, counters, etc... and can stay there for weeks, possibly infecting someone! So keep surfaces very clean, using antibacterial soap or bleach wipes followed by good handwashing.

## For Clients on Droplet Precautions, You May Have To:

- Wear a surgical mask when working within 3 feet of the client
- Put surgical masks on these clients if they need to be around uninfected people for a short period of time
- Wash hands, wear gloves and clean surfaces

## Additional Precautions for Contact Transmission

Diseases that are spread by *contact transmission* are spread by people directly or indirectly touching the germ. Direct contact means that the skin of an *infected* person touches the skin of an *uninfected* person. Indirect contact means that an uninfected person touches an *object* that has been touched by an infected person.

Here are some examples of contact transmission:

- Without wearing gloves, you change the clothes of a client who has a rash infected with staph germs (MRSA). Then, you bathe your next client without washing your hands and without wearing gloves
- You wear gloves when you turn a client with scabies, but since the gloves are still dry, you forget to change them for the next client

These precautions are used *in addition to* Standard Precautions for clients who have (or might have) infections spread by contact.

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## For Clients On Contact Precautions, You May Have To:

- Put gloves on before you enter the client's room or home
- Change your gloves during client care, especially after contact with highly contaminated items
- Take your gloves off right before you leave the client's room or home. Be careful not to touch contaminated items on your way out and remember to wash your hands immediately!
- Use a waterless, alcohol-based hand rub if you must wash your hands often. They save time and more than twenty published studies show that they are more effective than soap in reducing bacteria on your hands
- Disinfect any client care equipment used on a client with a contact infection

## Wearing Gloves

Proper hand washing and removal of gloves is extremely important in preventing the spread of infection. Here are a few reminders:

- Keep your fingernails clean and short. You should avoid wearing nail polish or artificial nails
- Do not wear rings or other hand jewelry. The skin underneath will have more bacteria because jewelry can block soap and water from reaching those areas
- Make sure that you cover any cuts or abrasions on your hand with a waterproof dressing
- When taking gloves off, remove your first glove by peeling it off inside out
- Then place the fingers of your ungloved hand inside the cuff of the other glove and peel it off inside out. Holding the gloves inside out, throw them away immediately
- Be sure to wash your hands before *and* after wearing gloves



# Standard Precautions and Infection Control

## Standard Precautions for Handling Client Care Equipment

Client care equipment includes everything you use during your work with a client such as thermometers, blood pressure cuffs, bath basins, bed pans, bedside commodes, walkers and wheelchairs. Make sure that equipment does not get passed from one client to another without being cleaned properly. If possible, limit equipment to only a single client. Any “used” client care equipment should be cleaned. Remember that this equipment may be soiled with germs from blood, body fluids, body secretions or body excretions. If a client care item is only meant to be used once, be sure to throw it away after using it.

## Linens and Beds

- Do not *shake* dirty client linens. Instead, roll them up and place them in a hamper or bag for cleaning
- Be careful when you handle dirty linens so that you don’t soil your clothes. Hold dirty linen *away* from your body
- Linen that is soiled with blood and/or other body fluids should be washed immediately. It does not have to be washed separately from other laundry
- You must thoroughly clean client equipment such as beds, bedrails, bedside tables and other frequently touched surfaces
- If you work in clients’ homes, be sure you know what cleaning solutions you are using. Never use any unlabeled solutions
- Remember that sponges and cleaning rags carry lots of germs. If you “clean” client areas with a dirty sponge, you might just be spreading germs around. Be sure to change your sponge or rag frequently

## Exposure to Bodily Fluids

- If you think you have been exposed to body fluids from a needle-stick or splash, wash the area immediately and thoroughly with antibacterial soap and water
- If fluid is splashed in your eyes or nose, flush with running water for at least 15 minutes
- If you have been exposed to Hepatitis B and have not been vaccinated, you may want to consider getting the vaccination now
- If you are exposed to sexually transmitted diseases such as HIV or syphilis, you may be given preventive medicines from your doctor
- Talk with your doctor about tests to determine if you have been infected
- You may be required to fill out an exposure report form

**If any exposure occurs, tell your supervisor as soon as possible.**

# Standard Precautions and Infection Control

## Standard Precautions for Handling Bio-hazardous Waste

Bio-hazardous waste is garbage contaminated with germs that can cause disease. It includes things like:

- Discarded wound dressings
- Used needles
- The contents of a bedpan, urinal or catheter bag

Follow the policies and procedures for disposing of bio-hazardous waste. Some items may need to be bagged or double-bagged (although one bag is usually enough). Bags containing bio-hazardous waste should be labeled and are often made of red plastic.

Used “sharps” must be disposed of in a puncture-resistant container. If you work in clients’ homes and you notice that sharps are not being disposed of properly, let your supervisor know immediately.

## Do You Recognize This Symbol?

It's the symbol for *bio-hazardous waste*. Never put your bare hand into a bag or other container marked with this symbol! These containers are used to dispose of used sharps and infectious waste. It is estimated that each year 385,000 needle sticks happen to healthcare personnel. That’s an average of over 1,000 per day! Also, please protect our neighborhood trash removal workers by disposing of sharps and containers properly.



- If you find a used needle, **do not recap it**
- Dispose of used needles and scalpels immediately in a **puncture-resistant container**
- Some doctors offices/hospitals or pharmacies carry these containers. If you are unable to get one, please contact PCHS and we will help you troubleshoot

## A Few Words On Safety and Compliance

We should all take great care to prevent the spread of illness and infection. With attention to detail and sensible work habits, most infection control-related accidents can be avoided. Here are some safety reminders:

- Remember to stay focused on what you are doing. Don’t let yourself go on “autopilot” because you have done the task so many times before
- Get enough sleep. Don’t let yourself get careless because you are tired
- Ask for help if you need it and don’t try to do too many things at one time
- Use proper infection-control procedures and do not take shortcuts in your work
- If you are stuck by a needle, immediately wash with soap and water.
- If you are stuck by a needle, immediately wash with soap and water. Call PCHS immediately and we will give additional instruction
- Diseases such as Hepatitis C and HIV can be transmitted by needle sticks. Call PCHS and report to the nearest urgent care or emergency room

# Standard Precautions and Infection Control

## Basic Information About Influenza:

- Flu season in the United States ranges from October through March, but most people tend to “catch” the flu in either December, January or February
- The flu can break out anywhere in the world. It doesn’t matter if you live in a warm or a cold climate
- In general, the best time to get a flu shot is during October or November. However, it’s not too late to be vaccinated in December or January
- Approximately 90 million Americans get the flu every year. 100 thousand people need to be hospitalized and over 20 thousand of them die
- In general, the flu hits very suddenly. All the symptoms seem to come at once: fever, chills, headache and muscle aches. The fever is often *higher* than 101 degrees
- A flu shot is required by PCHS. You may refuse and sign a waiver stating that you will wear a mask at all times during the flu season

## Basic Information About Tuberculosis:

Around the world, two *billion* people are infected with TB. Two million of them die every year. The bacteria that cause TB have been around since prehistoric times. However, in recent years, these germs have learned how to outsmart our best TB drugs. This new kind of “super” TB germs like to attack people with weakened immune systems—like people with AIDS.

People who have a positive TB skin test but who are *not* sick are said to have TB infection. These people show no signs of the disease and can’t spread it to others. (However, they may need to take anti-TB medications to prevent the disease.) People who are actually *sick* with tuberculosis are said to have TB disease. They have *active* or *infectious* tuberculosis disease—and can spread it to other people. Tuberculosis bacteria die very slowly, so people with TB must take medications for many months—even after they stop feeling sick.

## Basic Information About HIV & AIDS:

- AIDS is a disease that attacks the immune system. It’s caused by a virus known as HIV
- HIV is carried by the blood and other body fluids. It can be spread through unprotected sex with an infected person, by sharing drug needles, during childbirth or from an accidental exposure to body fluids
- HIV is *not* spread by air, dishes, silverware, food, clothes, toilets, insects or animals. In fact, HIV is not easily spread
- Every person with AIDS has been infected with HIV, but not everyone with HIV has developed AIDS

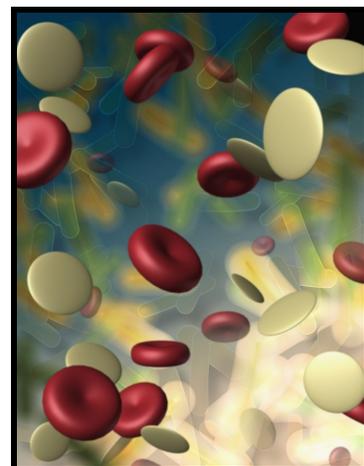
# Standard Precautions and Infection Control

## Basic Information About Hepatitis C:

- Hepatitis C spreads by contact with an infected person's blood. It is the most common bloodborne infection in the United States
- Hepatitis C is *not* spread through hugging, sneezing or by sharing eating utensils
- Health care workers are at risk for hepatitis C. So are people who received blood transfusions before 1992 and those who use IV drugs
- Many people with Hepatitis C have no symptoms until late in the disease. Others have flu-like symptoms, fatigue, dark urine, abdominal pain and nausea
- *Acute* hepatitis causes a sudden inflammation of the liver that lasts several weeks. Hepatitis is considered *chronic* if the liver inflammation lasts longer than six months potentially leading to liver failure and death
- Liver disease is on the rise in the United States. However, experts guess that more than half of all liver disease could be prevented if people follow proper infection control procedures

## Basic Information About Drug Resistant Bacteria:

- Over the past fifty years, bacteria have learned how to survive—even when they are attacked by strong antibiotics
- MRSA and VRE is a “staph” infection that is resistant to antibiotics. People who are very sick, elderly or who have wounds are most at risk for MRSA infections. Staph germs can be found on the skin, in the nose, in blood and in urine. Individuals can become carriers of MRSA and not know it, so always use standard precautions
- CDIF is a drug resistant infection caused by germs that live in the intestines. It is spread by unwashed hands or soiled surfaces. CDIF has spores and can live on surfaces for up to six months
- Salmonella germs live in the ovaries of most chickens. People who eat raw or undercooked eggs are most at risk for being poisoned by salmonella
- E. Coli germs live in the intestines of most animals (and humans). They show up most often in raw milk and undercooked beef. People have died from E. Coli food poisoning



# Standard Precautions and Infection Control

## Tell Your Clients Why Standard Precautions Are Important

Some clients may get offended when they see you wearing gloves. They may say something like, “*Oh, you don’t need gloves. I don’t have anything that’s contagious.*” Be sure to explain that protective barriers like gloves, gowns and masks are for their protection as well as yours.

Tell them:

- These precautions can prevent the spread of infection from one part of their body to another
- That gloves prevent the spread of disease and infection from one client to another
- That they should insist on the use of *clean* gloves from each of their healthcare workers—and that they should ask all employees who come in their room if they have washed their hands

## Some Basic Infection Control Terms

- **Disease** is a sickness caused by bacteria or viruses
- **Bacteria** and **Viruses** are tiny germs that can carry disease
- **Pathogens** are germs that can cause disease
- **Bloodborne Pathogens** are viruses or bacteria that can cause disease and are carried in a person’s blood
- **Airborne Pathogens** are viruses or bacteria that can cause disease and are spread by germs that can float through the air
- **Droplet Pathogens** are viruses or bacteria that can cause disease and are spread by germs that are too heavy to float in the air and are usually spread during coughing, sneezing or talking
- **Contact Pathogens** are viruses or bacteria that can cause disease and a spread through direct contact with an infected person’s skin

## Resources

[www.cdc.gov](http://www.cdc.gov)

[www.fda.gov](http://www.fda.gov)

[www.osha.gov](http://www.osha.gov)

[www.thebody.com](http://www.thebody.com)

[www.hivandhepatitis.com](http://www.hivandhepatitis.com)

[www.info.med.yale.edu/ynhh/infection/welcome.html](http://www.info.med.yale.edu/ynhh/infection/welcome.html)

[www.niddk.nih.gov](http://www.niddk.nih.gov)

[www.infectioncontrolday.com](http://www.infectioncontrolday.com)

[www.icna.co.uk/default.asp](http://www.icna.co.uk/default.asp)

[www.infectionctrl-online.com](http://www.infectionctrl-online.com)

[www.aids.org](http://www.aids.org)