

# TIP Cards for Basic Infection Prevention

#### Introduction to the TIP Cards

After reading through the information on these cards we hope that you will be better prepared to help us, <u>help you</u> to fight infections. As you look through the materials please pay particular attention to these topic areas as they will help you to prevent infections that might be related to your kidney disease and dialysis:

- Learn the signs of infection that should be reported to your care givers
- Identify common areas in the dialysis unit where germs can be found
- Tell us why hand hygiene and access site care are important to your health
- Describe how you can be empowered to help prevent infections in the dialysis setting

We'll be asking you to take a short quiz at the end of each of the topic areas. Don't be nervous about taking the tests. You won't get graded; we just want to see if these materials helped you to learn more about infections!

## Background Information

Germs, also called bacteria, are found everywhere in your surroundings whether it's at the dialysis center or at home.

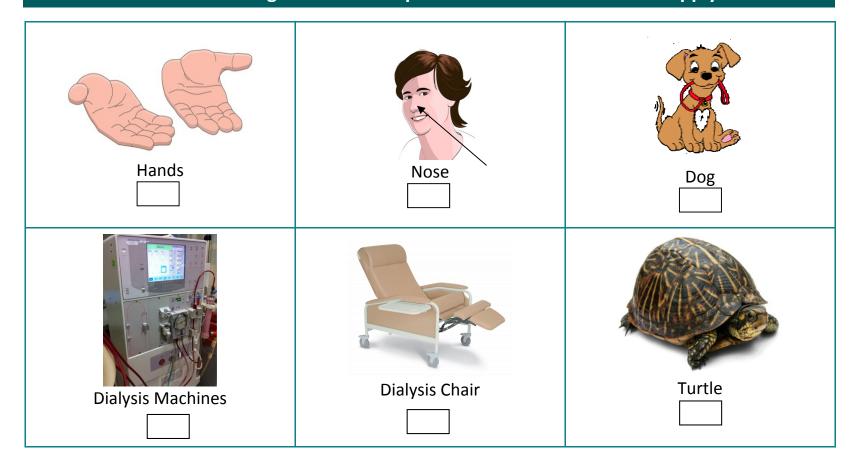
#### They live:

- on our hands and skin
- in our nose and mouth
- on the hands of your medical staff and in their noses
- on your pet
- inside and outside your house
- on surfaces and equipment



# Germs are pretty much everywhere!

## On which of these items might bacteria be present? Check all boxes that apply.



Answer: All boxes should be checked. Hands, Nose, Dog, Dialysis Machines, Dialysis Chairs, and Turtle

#### Did you know that dialysis patients are at higher risk for infections?

#### Here are some of the reasons why!

- You are close to other people when you are at the dialysis center. Germs can be spread through touch, through the air or through your nose and mouth.
- Your skin is a natural barrier to bacteria. Every time you do a PD exchange, or have needles put into your vascular access, that barrier is broken. If you have a dialysis catheter, your skin is never totally intact.

- Some of the medications that you take to treat other conditions may increase your risk of infection (like iron or steroids).
- If you have diabetes you might be at higher risk for infections. Too much sugar in your blood can keep your body's white blood cells (cells that fight infection) from doing their job.
- Cells that fight infection (antibodies) are made out of a type of protein. If you are malnourished and not eating enough protein, you are more prone to infectious disease.

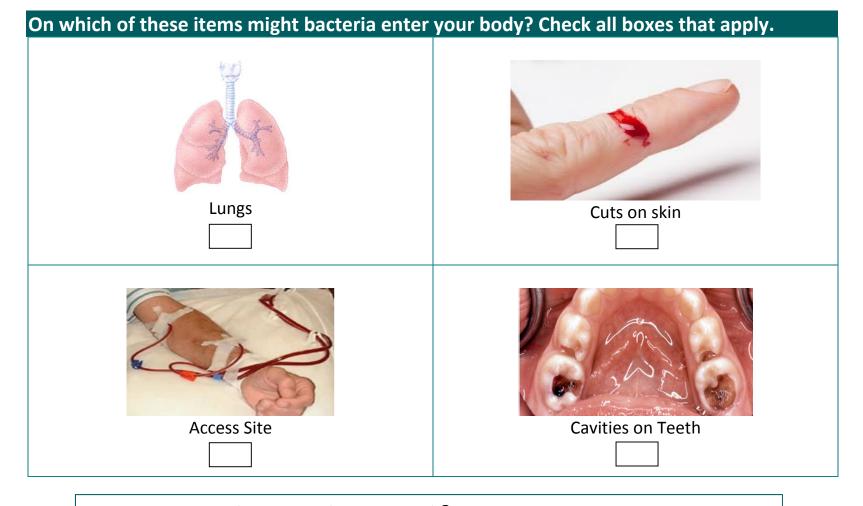
Questions:		
1. Germs can easily be spread:	2. Your skin is a natural barrier to germs.	
<ul><li>a) From patient to patient</li><li>b) From staff to patient</li><li>c) From dialysis equipment</li><li>d) All of the above</li><li>e) None of the above</li></ul>	a) True b) False	
<ul><li>3. Medications that you take can:</li><li>a) Decrease the chance of infection</li><li>b) Increase the chance of infection</li><li>c) Will do nothing at all</li></ul>	<ul> <li>4. If you have diabetes and have a high blood sugar, what can happen?</li> <li>a) The sugar will help fight infection</li> <li>b) Your body will have a hard time fighting infections</li> <li>c) Nothing will happen</li> </ul>	

Answers: 1. **D** 2. **A** 3. **B** 4. **B** 

## How can you get an infection?

Germs can enter your body in a variety of ways and cause an infection through:

- Your access site if your skin is not clean
- Your blood if unsterile needles or syringes are used
- Your lungs as with a cold or flu
- Your skin if broken with a sore or cut
- Your mouth as with cavities in your teeth or gum disease
- Your digestive system when you have an intestinal problem (like diarrhea) or by eating contaminated food
- Your mucous membranes from unprotected sexual activity and sharing of food or drinks



Answers: All boxes should be checked. Lungs, Cuts on Skin, Access Site, Cavities on Teeth

## This is the Way your Body Fights Infections - In Case you Want the Details!

First your body gets invaded by some type of bacteria (there are many different kinds).

Your body revs up your immune system and sets out to destroy the germs.

Your immune system is your own personal "army" that helps your body prevent and fight infections.

The "soldiers" that fight the bacteria are called immunoglobulins (or antibodies).

They are made of immune system proteins.

What your body does	Why it helps
Your temperature goes up.	Causing a fever helps your immune system weaken the bacteria or virus and helps the antibodies fight the germs.
Your body increases blood flow to the infection site to fight the invading germs.	White blood cells and antibodies are carried to the infection site to fight the invading germs. The higher blood flow rate can cause the site to look red, have swelling and feel hot to the touch. The inflammation can also cause you to have pain.

- 1. Why does your temperature go up when you have an infection?
  - a) Antibodies fight the germs causing your temperature to go up
  - b) Fever helps your immune system weaken the bacteria or virus
  - c) a & b
  - d) None of the above

- 2. Your immune system is like a(n)
  - a) Plant
  - b) Army
  - c) Animal

Answers: 1. C 2. B

## Signs and Symptoms of Infection

Look at your vascular access site every day and check for signs and symptoms of infection, such as:

- Redness at the access site
- Swelling and pain or tenderness at the access site
- Oozing, pus, or drainage from around the access site

Your body may also show:

- Chills, fever
- Nausea, vomiting
- Body aches



This is a picture of an infected dialysis catheter. Notice the red skin around the catheter and the little bit of drainage. Make sure your dialysis team gets in contact with the doctor or surgeon about this! If they don't, it could lead to a severe blood infection.

CALL YOUR HEALTHCARE PROVIDER IMMEDIATELY IF YOU OR YOUR ACCESS SITE SHOWS ANY OF THE ABOVE SIGNS AND SYMPTOMS

- 1. What are some signs of an infection on or around your access site?
  - a) Redness
  - b) Swelling
  - c) Oozing, pus or drainage
  - d) Pain or tenderness
  - e) All of the above

- 2. Chills, nausea, vomiting, and body aches might be signs that you are getting an infection.
  - a) True
  - b) False

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#### What are bacteria?

Bacteria are single cell organisms. The human body is home to millions of them. Most are friendly and are found almost everywhere in the body. When they are found in the wrong place in your body their numbers increase dramatically. A commonly seen infection of the skin or blood is one involving staphylococcus (pronounced staf-i-lo-kok-us) bacteria.

#### What are viruses?

Viruses are the smallest type of germ that is known and can cause infections such as colds and flu, herpes, and hepatitis. Viruses are even smaller than bacteria and need to live inside cells to reproduce and spread infection.

#### What are fungi?

Fungi include microorganisms such as yeasts and molds. Nail fungus and ringworm are a few examples of this type of infection.

- 1. What are examples of a virus?
  - a) Cold
  - b) Flu
  - c) Hepatitis
  - d) Herpes
  - e) All of the above
- 3. What are examples of fungi?
  - a) Yeast
  - b) Mold
  - c) Nail fungus
  - d) Ringworm
  - e) All of the above



- 2. The picture above is of a \_\_\_\_\_?
  - a) Fugus
  - b) Bacteria
  - c) Virus

Answers: 1. **E** 2. **B** 3. **E** 

## Things You Can Do To Prevent Infections

SPEAK UP and ASK	Do not hesitate to speak up and ask questions about your treatment, your access, or any concerns you may have.
Keep your hands clean	By ensuring that your hands and your caregiver's hands are clean, you can help to prevent the spread of germs.
Keep your access site clean	Always wash your fistula or graft prior to dialysis treatment to prevent infections from going into your bloodstream. Some clinics might teach their patients how to perform an emergency catheter dressing change.
Keep your hands away from your access site	Never scratch or pick at the access site and don't remove any scabs at the site.

- 1. It is OK to scratch and pick at my access site.
  - a) True
  - b) False

- 2. What is one of the things you can do to help prevent the spread of germs?
  - a) Never washing your hands
  - b) Keeping your hands clean

Answers: 1. **B** 2. **B** 

## **Hand Hygiene**

There are 2 ways to clean your hands: using an alcohol-based hand gel or using soap and water.

#### When using an alcohol-based hand gel:

- 1. Apply enough hand gel to cover all surfaces.
- 2. Rub entire palms, hand and fingers surfaces including the backs of the hands, the backs of fingers and between fingers until dry.

#### When using soap and water:

- 1. Be sure to wet hands.
- 2. Apply enough soap to clean all hand surfaces.
- 3. Rub surfaces paying special attention to the backs of the hands, the backs of fingers and between fingers.
- 4. Rinse hands well and dry with paper towel.
- 5. Use a paper towel to turn off the faucet.

#### Wash your hands:

- Before every dialysis treatment
- Before eating
- After using the restroom



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1.	ist the steps to cleaning your hands with soap and water in order by writing the letters in the boxes on the right from the descriptions on the left.	
	A. Rub surfaces paying special attention to the backs of the hands, the backs of fingers and between fingers.  B. Be sure to wet hands.  C. Rinse hands well and dry with paper towel.  D. Use a new paper towel to turn off the faucet.  E. Apply enough soap to clean all hand surfaces.	
2.	When should you always wash your hands with soap and water?	
	Before every dialysis treatment  Before eating  After using the restroom  All of the above	

Answers: 1. B, E, A, C, D 2. D

## Remember...

**YOU** are an important part of infection prevention. Keeping your hands clean whenever possible will help protect you and your access site from infections.

Module 2 will cover infection prevention related to your access site.

