# Peer Mentoring

## Course 6: New to Dialysis

ESRD NCC
NATIONAL COORDINATING CENTER

# Course 6: New to Dialysis

### This course has seven parts:

# Course 6: New to Dialysis

Welcome to Course 6!

This course will continue your training to become a peer mentor. The course will prepare you to help a peer who is new to kidney disease.

You are not expected to be an expert in dialysis. That is the role of the healthcare staff at your facility. They will answer your peer’s questions. They will also support you in your role as a peer mentor.

After taking this course, you will be able to:

- Describe treatment choices for kidney failure.
- Explain the three types of vascular accesses.
- Tell what the members of the healthcare team do.
- Give examples of kidney-friendly foods.
- Share an understanding of what is checked with blood tests.
- Explain what you can do to prevent infections.

## This course has seven parts:

- Part 1: Introduction
- Part 2: The Basics of Vascular Access
- Part 3: Options for Treatment
- Part 4: Members of the Healthcare Team
- Part 5: Kidney-Friendly Foods
- Part 6: Monitoring the Dialysis Treatment
- Part 7: Basic Infection Prevention

Please read all seven parts. You can also go back and re-read parts as you wish.

After you have finished, take the quiz about what you learned.

# Part 1: Introduction

Healthy kidneys remove extra fluid and waste from the blood. When kidneys can no longer do this, fluid and waste build up in the body. This condition is known as kidney failure. Another name for kidney failure is end stage renal disease. Dialysis is one treatment for kidney failure. A kidney transplant is another treatment choice.

## Ways to Get Dialysis

A person can choose how to get dialysis. He or she can choose hemodialysis. Or he or she can decide on peritoneal dialysis.

Hemodialysis is where blood is pumped out of the body to a machine that acts as a kidney. The machine cleans the blood. The cleaning is called filtering. The blood is returned to the body after it is cleaned. Hemodialysis can happen in a facility. Or it can be done at home.

Peritoneal dialysis is another way to get dialysis. This type of dialysis uses the lining of the belly, or abdomen, to clean the blood. The lining of the abdomen is called the peritoneum. A solution flows through a tube into the abdomen. The lining of the abdomen acts as a filter. The lining removes waste products and water. Then the solution flows back out. The solution carries with it waste products and extra fluid.

## Kidney Transplant

A kidney transplant is also a choice for someone with kidney failure. Kidney transplantation is surgery to give someone a new kidney. The new kidney takes over the work that the failed kidneys cannot do.

Only one kidney is transplanted. A person can live a healthy life with one working kidney.

## Part 2: The Basics of Vascular Access

A vascular access must be made or placed for hemodialysis. A vascular access is what is used to connect the machine to a person's blood system. This is the same if a person gets treatment at a clinic or at home.

***Blood system = circulatory system***

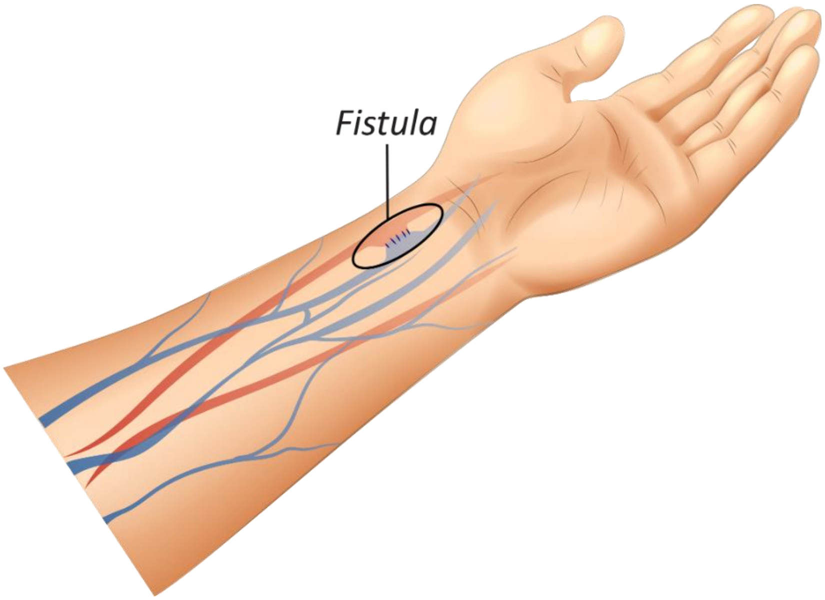
The access is put in by a vascular surgeon. He or she is a trained doctor who manages conditions of the veins. The person getting the access talks with the surgeon about which type of access to get.

### Types of Vascular Accesses

There are three types of vascular accesses:

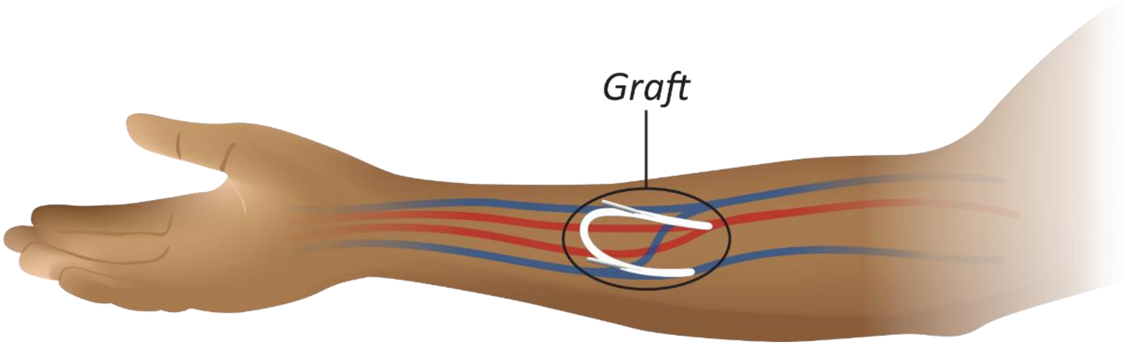
**1. Fistula**

For this type, a person's own vein is connected to an artery. This forms the fistula.



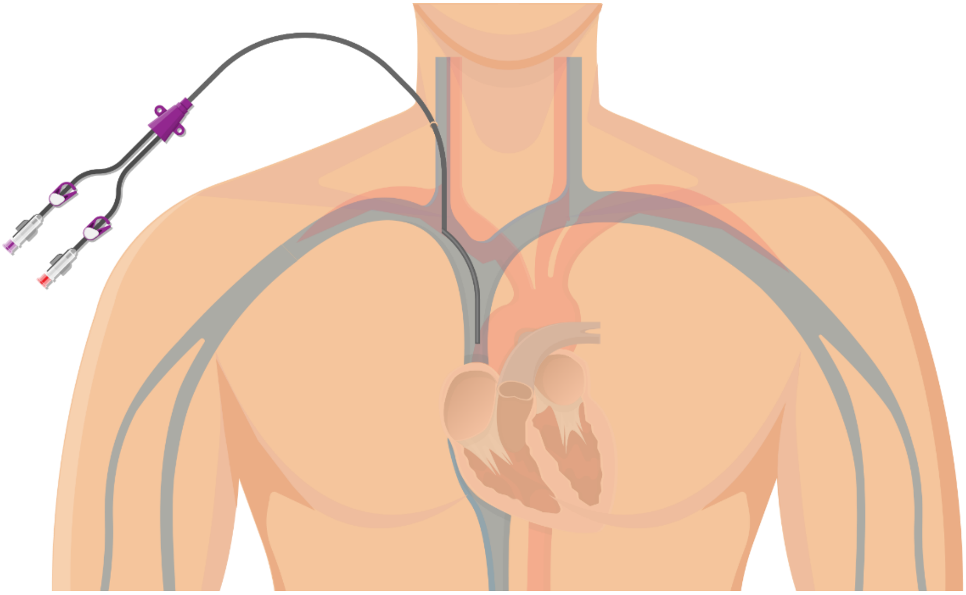
## 2. Graft

An artificial material is placed under the skin. The material connects a vein to an artery.



## 3. Central Venous Catheter

A flexible tube is inserted through the skin in the neck or chest. The tube is placed into a large vein and ends in the heart.



## The Three Choices for Access

Many people getting hemodialysis will need a permanent vascular access at some point. Some people may need more than one.

A fistula or a graft is a permanent access. A person will need surgery to get one. A fistula or a graft can last a long time and can be used over and over again.

A person may be able to keep a fistula the longest of the three choices. Also, a fistula does not have as many problems as a graft or a catheter does. A person with a fistula may not have as many infections as someone with a graft or a catheter. And a person with a fistula may not have to go to the hospital as often.

> ***A fistula does not have as many problems as a graft or a catheter.***

A catheter is only temporary in most cases. A catheter does not last as long as a fistula or a graft. The catheter also has a higher risk of infection. A person with a catheter may also experience:

- More stays in the hospital.
- Longer treatment times.
- Not being able to shower without a special covering.
- More clotting in the catheter than in other types of accesses.
- Risk of ruining an important vein that the catheter is in.

## Starting the Conversation about a Permanent Access

As a mentor, you can help your peers get information about the different access types. Your peers may have reasons for starting dialysis without a permanent access.

Some may have started treatment on an emergency basis. They would not have had time to plan for an access.

Others may have other health conditions. These may have stopped them from getting the access surgery.

Some may have been overwhelmed. They would have gotten a lot of information. They also would have had to make decisions when they were first told they had kidney failure.

It does not matter what the reason is. You can begin sharing information. You can help your peer as he or she makes a decision about a permanent access.

Always start with finding out your peer's understanding of the topic. The best way to do that is to ask your peer open-ended questions:

- Do you know what a vascular access is?
- Are you interested in learning more about vascular access?
- Do you understand the different types of accesses?
- What type of information did you receive?
- What other information do you need?

## Tips for Success

- Remember, every peer is at a different place in his or her journey. He or she may not want to talk about permanent access.
- Offer encouragement as your peer considers a choice.

## Part 3: Options for Treatment

A person starting treatment for kidney failure can choose his or her treatment. The person can choose to get dialysis in a center. Or he or she can get dialysis at home. And the person can choose hemodialysis or peritoneal dialysis. A kidney transplant is another option. Which treatment to choose is a personal choice.

Let's briefly talk about all of them.

### Hemodialysis at the Dialysis Facility

In this country, most people with end stage renal disease get this treatment. The dialysis is done at a dialysis center. Nurses and patient care technicians are trained to carry out the treatment.

Hemodialysis uses a machine and an artificial kidney, or filter. The blood is cleaned as it passes through the filter. Waste products like potassium and protein are removed. Dialysis also removes the fluid that builds up in the blood because the person does not urinate as much.

> ***Kidney failure = end stage renal disease***

Hemodialysis at a facility is usually done three times a week. It takes between 3 and 4½ hours each time. The number of times and how long the treatment takes are decided by the doctor.

It is important for a person getting dialysis not to miss a treatment even for emergencies. The waste products and fluid will build up. The person could become sick.

## Home Hemodialysis

This treatment is the same as hemodialysis that is done at the dialysis facility. But the treatment is done at home.

A person doing the treatment will be more involved in his or her own care. He or she will need training. The person may have a care partner to help with the treatments. The care partner will also have to have training.

Home hemodialysis requires a dialysis machine, water source, and storage of supplies to perform the treatments. The number of treatments can be from three to seven times a week. The number of hours will be based on the number of treatments per week and medical needs.

Home hemodialysis can be done during the day or at night. The treatment is the same except the nighttime treatment is done during the night hours or during sleep.

It is important for a person getting dialysis not to miss a treatment even for emergencies. The waste products and fluid will build up. The person could become sick.

## Peritoneal Dialysis

This type of dialysis uses the lining of the belly, or abdomen, to clean the blood. The lining of the belly is called the peritoneum. A solution flows through a tube into the abdomen. Another name for the tube is catheter. The lining of the abdomen acts as a filter. The lining removes the waste products and water.

***Peritoneum = lining of the abdomen***

There are two ways a person can do peritoneal dialysis. The first type is called continuous ambulatory peritoneal dialysis. Another name for this is CAPD.

The second type is called automated peritoneal dialysis or APD.

## CAPD

A solution called dialysate is put in the abdomen. The solution flows through a tube. The peritoneum works like a filter as the dialysate pulls waste products and fluid from the blood. The abdomen being filled and emptied with the solution is called an exchange. Each exchange takes about 30 to 40 minutes. The exchanges must be done every four to six hours. These exchanges can be done at home, work, or any clean place. The person is free to go about normal activities. This is true even during the exchanges.

***Dialysate = solution used for peritoneal dialysis***

## APD

APD differs from CAPD. In APD, a machine called a cycler delivers the dialysate into the abdomen. The cycler then drains it. The treatment is usually done at night during sleep. But more exchanges may be needed during the day as well.

A person can choose the type of peritoneal dialysis. Which type the person chooses will depend on what he or she prefers. It will also depend on the person's medical condition. The person should talk with his or her doctor to find out which option is best for him or her.

## Kidney Transplant

Getting a kidney transplant is also a choice for someone with kidney failure. Kidney transplantation is surgery to give someone a new kidney. The new kidney takes over the work that the failed kidneys cannot do.

The new kidney comes from another person. The person getting the kidney is called the recipient. The person giving the kidney is called the donor.

Only one kidney is transplanted. A person can live a healthy life with one working kidney.

A transplant is not for everyone. A person has to be healthy enough to have the surgery. The person also must be able to take the medicines that will help his or her body to accept the new kidney.

The person’s doctor and healthcare team will help him or her get a referral to see a transplant team. The transplant team will check to see if he or she is eligible for a transplant. They will also help answer questions about the process.

## Talking about Treatment Choices

Talk with your peer about treatment options. Share information on dialysis and kidney transplants. Keep in mind that each of these is an option.

Your role is to give your peer information about the treatment choices. If you have done this, you will have succeeded as a mentor. Your peer can then decide what is "the right choice" for him or her.

## Tips for Success

- Ask the healthcare team to assist you or your peer when needed. For medical questions, get the healthcare team involved right away.
- Use active listening skills to decide the best time to share information with your peer.

Pay attention
Show you're listening
Provide feedback
Don't judge
Respond appropriately

## Part 4: Members of the Healthcare Team

Getting to know the healthcare team will help your peer to be active in his or her care. Your peer can tell the team what he or she needs. Your peer can also tell the care team how he or she is feeling. And he or she can work with the healthcare team to make decisions.

Each member of the healthcare team has a special role.

**Nephrologist**

A nephrologist is a kidney doctor. He or she has special training to treat kidney disease.

The doctor is the person who orders all of the dialysis treatments. The doctor also prescribes the medicines related to kidney disease. This includes medicines taken during dialysis and at home.

***Nephrologist = kidney doctor***

**Nurse**

The nurse works at the dialysis facility. The nurse works closely with the doctor to make the dialysis treatments fit the person's needs. The nurse reviews the results of blood tests.

For treatment at the facility, the nurse oversees each treatment the person gets. The nurse checks to see how the person is doing and feeling. The nurse is also available to answer questions about health care.

For treatment at home, the nurse trains the person getting dialysis. The nurse also trains the care partner if there is one. The nurse is available by phone if needed. He or she checks how the treatments are going. He or she also answers questions.

### Patient Care Technician

The technician is a vital part of the healthcare team. This is especially true when a person gets hemodialysis at the center. The technician can put the person on and take the person off the dialysis machine. This is done under a nurse’s supervision. The technician also watches the blood pressure. In home programs, he or she may reinforce the training the nurse gives. He or she can also help with ordering supplies.

### Social Worker

The social worker helps with insurance. He or she shares information on transportation. He or she can counsel a person coping with kidney disease. The social worker can also help the person find a job and get job training.

### Dietitian

The dietitian helps a person with kidney disease choose the best foods to eat. He or she shares information on dialysis-friendly foods and how much fluid to drink. The dietitian also reviews the results of blood tests each month.

### Transplant Team

This team is like the dialysis treatment team. But this team is focused on the kidney transplant process. The team usually includes:

- A transplant surgeon
- A kidney doctor
- A pre-transplant coordinator
- A social worker
- A dietitian

## Working with the Healthcare Team

As a peer mentor, you may suggest that your peer talk with different members of the healthcare team. The team can answer your peer’s questions. The team can also talk to your peer about situations that are beyond your role as a mentor.

## Tips for Success

- Know your role as a peer mentor.
- Keep your conversations focused on topics related to your role.
- Ask the healthcare team to assist you or your peer when needed. For medical questions, get the healthcare team involved right away.

## Let's Practice Mentoring!

Amy is a peer mentor at her dialysis facility. Debbie is a new dialysis patient. She wants to be a peer mentee to learn more about dialysis. Amy is paired with Debbie.

Amy contacts Debbie. They set up a time to meet. Amy begins by sharing her own experience with dialysis. Debbie begins to cry. Debbie says she is depressed and is not sure if she wants to continue with her treatments.

Amy begins to ask Debbie questions:

- How does dialysis typically make you feel?
- Overall, how do you describe your mood?
- How would you like to improve your life to be happier?

Is it okay for Amy to ask these questions?  No!

Amy tried to take on the role of the social worker. A social worker can counsel a person who is coping with kidney disease. A peer mentor cannot.

Debbie may feel anxious, upset, or sad. When these feelings are intense, it is important for her to talk to a professional who is trained to help. When Debbie said she was depressed, Amy should have asked her to speak with the social worker.

"The social worker may be able to help you."

Was it okay for Amy to share her experience?  Yes!

Amy can talk about her experience. But she cannot counsel Amy.

As a peer mentor, you should be clear on what each member of the healthcare team does. That way you can refer your peer to the team when needed.

You should also understand your role as a peer mentor. If you are unsure about your role, talk with the healthcare team.

## Part 5: Kidney-Friendly Foods

Living with kidney disease means that a person has to change his or her diet. This is because the kidneys are no longer working. Everything the person eats and drinks now stays in the bloodstream.

The person still needs to eat foods that are good for him or her. Eating healthy foods keep energy levels up, prevents infection, and stops muscles from shrinking.

### Kidney-Friendly Foods

Examples of foods that are kidney friendly for most people:

- High-protein foods (meat, fish, poultry, and eggs)
- Grains (pasta, tortillas, bread, and rice)
- Cream cheese and ricotta cheese
- Low potassium fruits (apples, grapes, berries, and pears)
- Low potassium vegetables (carrots, celery, cucumbers, cauliflower, peppers, all types of lettuce)

### Foods to Avoid

Examples of foods that should generally be avoided:

- Oranges and orange juice
- Bananas
- Avocados
- Potatoes, potato chips, and sweet potatoes
- Tomatoes and tomato sauce
- Dairy products (milk, yogurt)

The person should talk with the dietitian about the right foods for him or her based on blood work or labs.

### Mentoring for Food and Fluid Choices

You can help your peer to be active in his or her meal planning. He or she can read the labels on all foods packages. He or she can also avoid adding extra salt. Instead, your peer can use herbs and spices to add more flavor to foods. Your peer can also talk with his or her dietitian.

Your peer's doctor and dietitian will educate him or her on how much fluid to drink. Each person is different. How much fluid to drink is based on body size and treatment type. How much fluid to drink is also based on the amount of urine the person produces. Each person needs to follow his or her own doctor's medical advice on how much fluid to drink.

### Tips for Success

- Suggest that your peer talk with a dietitian.
- Encourage your peer to take an active role in his or her diet plan.

## Part 6: Monitoring the Dialysis Treatment

A person getting dialysis has lab tests done once a month or more often. The blood tests check the progress of the dialysis treatments. The dietitian, the nurse, and the doctor review these labs. They make changes to the treatment as needed.

Many lab values are reported on the monthly blood tests. Here are a few of the more important ones.

### spKt/V (single-pool Kt/V)

This result is used to see if the person is getting enough dialysis. It measures the amount of waste products removed during the treatment. This lab value will determine how many hours the dialysis treatment will be.

### Potassium

Potassium is found in almost all foods. Too much potassium in the diet can cause heart problems. A person with kidney disease should talk with his or her dietitian to find out which foods to avoid or limit. Examples of foods to avoid are potatoes, oranges, and bananas.

### Calcium

Calcium is an important mineral. Calcium builds strong bones and teeth. With kidney disease, the calcium level can be low. The doctor might prescribe calcium supplements to help maintain a healthy level.

### Phosphorus

Phosphorus is found in almost all foods. A high level of phosphorus can cause bones to weaken and the skin to itch. If the phosphorus level is high, the doctor will prescribe a phosphorus binder to be taken with meals. The binder absorbs the extra phosphorus in the intestine. The phosphorus is then passed out in the stools.

### PTH (Parathyroid Hormone)

The parathyroid glands keep the calcium and phosphorus at normal levels. If the calcium level becomes low, the parathyroid gland gives off more hormone. This will pull calcium from the bone. If this continues, the bones will become weak.

### Sodium

Eating salty foods can cause a person to drink more liquid. Part of being on dialysis is limiting the amount of fluid the person drinks every day. If a person eats salty foods, fluids may build up in the body. The feet or legs may swell.

### Fluids

A person on dialysis must watch how much he or she drinks. Dialysis treatments remove as much fluid as possible. But dialysis cannot remove all the fluid. So the person must limit how much he or she drinks every day.

If too much fluid builds up, it can cause serious problems like:

- Trouble breathing
- Swelling in the feet and legs
- High blood pressure
- Stomach bloating
- Heart problems

A person gets weighed every time he or she arrives for dialysis. He or she also gets weighed again after the treatment. This is to measure how much fluid was removed.

**Weight**

Every patient has a dry weight or a target weight. The dry weight is the normal weight without any extra fluid. The target weight is the weight to be reached by the end of the dialysis treatment. The goal is to meet the target weight by the end of the dialysis treatment. The goal is met by the nurse and technician adjusting the dialysis machine to remove a set amount of fluid.

**Blood pressure**

During the treatment, the technician will check the blood pressure every 30 minutes. The person might experience a sudden drop in blood pressure if the machine removes too much fluid. Or he or she might feel lightheaded. The person getting dialysis should tell the nurse or technician about any of these signs. They can make adjustments to the dialysis machine.

## Your Mentor Role with Lab Tests

Talking about blood test results is the job of the healthcare team. Your role as mentor is to let your peer know that blood tests are being done. He or she should speak with the healthcare team to understand what the results mean.

## Tips for Success

- Suggest that your peer talk with the healthcare team about questions they may have.
- Encourage your peer to take an active role in his or her care. One way to do this is for your peer to talk with the healthcare team about blood test results.

## Part 7: Basic Infection Prevention

Fighting an infection takes energy and strength. Depending on where the infection is, it can be harder for the body to fight it. Infections also make a person feel bad.

A person with kidney disease may have weak defenses. This will make it harder for his or her body to fight the infection.

Germs are everywhere. Germs can cause disease. Germs are at the dialysis center and at home. Germs also live on surfaces such as hemodialysis machines and bedside tables.

Members of the healthcare team may call these germs bacteria, or a virus.

Everyone has germs on their skin, on their hands, and inside their noses. This includes patients and medical staff.

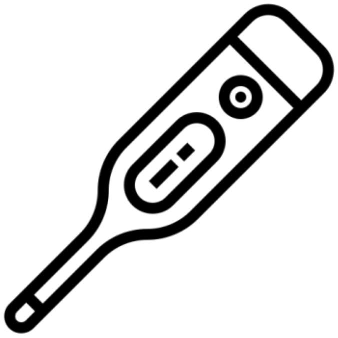
Since germs are everywhere, they can enter the body in many different ways. When this happens, the germs can cause an infection.

Not all germs are bad. Infections happen when "bad" germs enter the body or when other germs go where they are not supposed to be.

- A person can get germs by having close contact with someone who has an infection. Germs can travel in the air on droplets of water or dust. The germs can enter the mouth and nose this way.
- A person can get germs by touching a surface that has germs on it. If the person puts his or her hand to the mouth to eat something, the germ can get into the body.

### Signs of Infection

Signs of infection may include:



- Fever
- Chills
- Nausea and vomiting
- Body aches
- High blood sugar for people who have diabetes
- Red and warm skin around the access
- A cut or a sore that does not heal, especially for someone who has diabetes

## What to Do to Protect Against Infections

You can do five important things to protect against getting an infection or stopping one before it becomes serious.

1. Keep hands clean. Wash your hands before and after treatments. Ask caregivers and the healthcare team to do the same. Wash your hands when you return home, before and after eating, and after any activity where they would need it such as gardening.
2. Get vaccinated. Your doctor will suggest certain shots to prevent the flu or pneumonia.

3. Watch for and report any signs of an infection as soon as possible.
4. Be involved in your care. If you know and follow the rules to protect yourself from infection, you can ask those who take care of you to do the same.
5. Take care of your dialysis access site. Taking care of the site that is used to access the blood for hemodialysis or the belly for peritoneal dialysis is very important to preventing infection.

## Sharing Resources on Infections

You can share these three resources about infection prevention. The resources will give your peer information. The resources will also answer some of his or her questions.

You are not expected to know all of the information in the resources. Instead, you need to:

- Know what resources are available for your peer.
- Understand what your peer can learn from the resources.
- See how the resources can help you in your role as a peer mentor.

For any questions, you can encourage your peer to talk with the healthcare team.

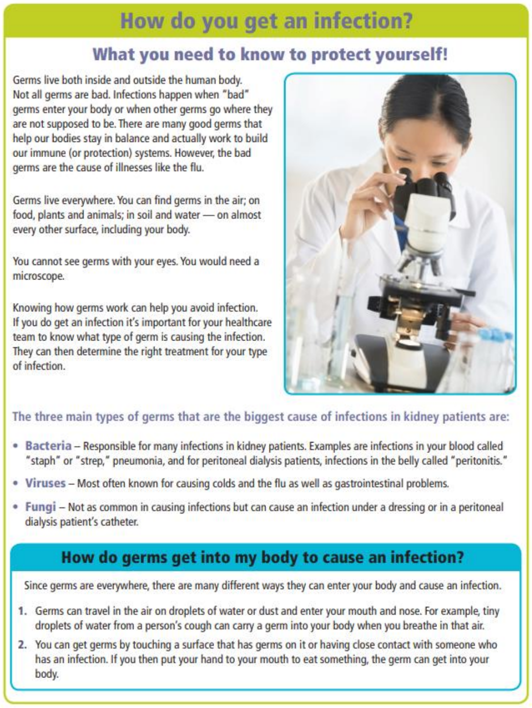
### 1. How do you get an infection? What you need to know to protect yourself!

This flyer covers a basic overview of how to protect against germs. It also discusses the definition of a germ. The flyer highlights the two ways germs can enter the body and cause infections.

Your peer can learn about three types of germs that cause infections in kidney patients.

This resource will allow you to:

- Open discussions about infections.
- Find out what your peer knows about infections.
- Learn if your peer needs more information.



How do you get an infection?

What you need to know to protect yourself!

Germs live both inside and outside the human body. Not all germs are bad. Infections happen when "bad" germs enter your body or when other germs go where they are not supposed to be. There are many good germs that help our bodies stay in balance and actually work to build our immune (or protection) systems. However, the bad germs are the cause of illnesses like the flu.

Germs live everywhere. You can find germs in the air; on food, plants and animals; in soil and water — on almost every other surface, including your body.

You cannot see germs with your eyes. You would need a microscope.

Knowing how germs work can help you avoid infection. If you do get an infection it's important for your healthcare team to know what type of germ is causing the infection. They can then determine the right treatment for your type of infection.

The three main types of germs that are the biggest cause of infections in kidney patients are:

- **Bacteria** – Responsible for many infections in kidney patients. Examples are infections in your blood called "staph" or "strep," pneumonia, and for peritoneal dialysis patients, infections in the belly called "peritonitis."
- **Viruses** – Most often known for causing colds and the flu as well as gastrointestinal problems.
- **Fungi** – Not as common in causing infections but can cause an infection under a dressing or in a peritoneal dialysis patient's catheter.

How do germs get into my body to cause an infection?

Since germs are everywhere, there are many different ways they can enter your body and cause an infection.

1. Germs can travel in the air on droplets of water or dust and enter your mouth and nose. For example, tiny droplets of water from a person's cough can carry a germ into your body when you breathe in that air.
2. You can get germs by touching a surface that has germs on it or having close contact with someone who has an infection. If you then put your hand to your mouth to eat something, the germ can get into your body.

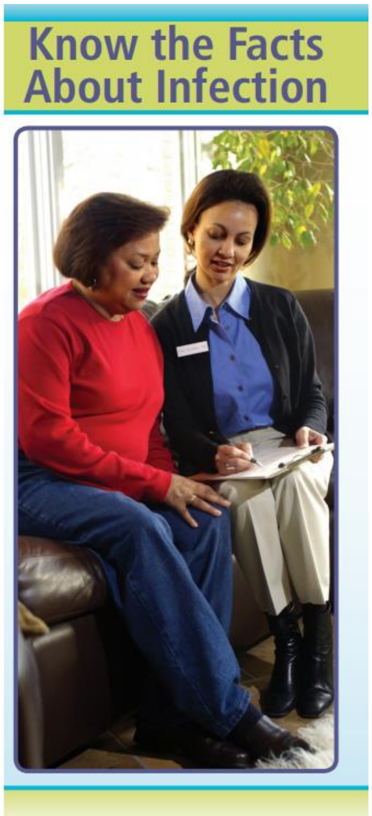
**2. Know the Facts About Infection**

This pamphlet answers simple questions about why germs cause infections and what can be done to protect against infections.

Your peer can learn why it is important for a person with kidney disease to know about infections. He or she will also read tips on staying healthy.

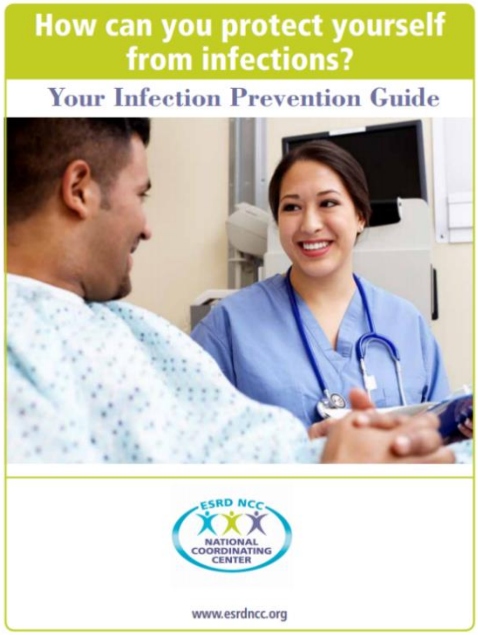
This resource will allow you to:

- Help your peer learn about ways to protect against infections.
- Find out if your peer has questions on infections.



Know the Facts About Infection

**3. How can you protect yourself from infections? Your Infection Prevention Guide**
This booklet is a comprehensive guide to preventing infections.



How can you protect yourself from infections?

Your Infection Prevention Guide

www.esrdncc.org

Your peer can learn about hand washing, vaccinations, and signs of infection. He or she can also learn about taking care of the dialysis access site and how to get involved in his or her own care.

This resource will allow you to:

- Share valuable information.
- Help your peer take an active role in his or her own care.
- Identify concerns your peer may have.

### Tips for Success

- Always ask your peer to talk with the healthcare team if he or she sees signs of infection.
- Be sensitive to whether your peer wants to talk about infections or read the materials.

### Where to Find Resources on Infection Prevention

You will find the resources listed in this course by going to the home page of this program. Click on the Resource button to find the links. Check to see if your dialysis facility can help print these for you.

## Next Steps in the Training Program

Congratulations on completing Course 6, New to Dialysis!

Next, please complete the Course 6 Review Quiz.