What you will learn:

- Why it’s important to maintain a clean environment
- When and how to keep clean for peritoneal dialysis (PD)
- How to set up your home for PD
By using cleanliness techniques, you can help prevent germs from entering into your peritoneal cavity during PD treatment. There are many directions and instructions to remember as part of your PD treatment. The good news is that, like any other routine, actions can get easier to remember the more times you do them. Use this booklet to remind yourself how to keep clean and set up properly for PD.

For additional resources on PD, check out: www.pdempowers.com

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Germs and PD

Maintaining a clean environment when performing your PD exchanges (or treatment) helps prevent germs from being introduced into your PD system and therefore helps prevent infection.

What does it mean to keep a “clean” environment? Here are some key concepts:

- **Clean** means that you have removed most, but not all, of the germs. Examples include: washing your hands and cleaning the table top before your PD exchange.
- **Sterile** means the item is free of germs. Your PD supplies come in sterile packaging.
- **Aseptic technique** involves a series of steps to keep an area as germ-free as possible.¹
- **Contamination** is when germs are introduced into a clean or sterile object or environment. This may cause an infection.¹

It is important to protect the following areas from germs and infection:

- Catheter
- Exit site (the skin area surrounding your catheter as it comes out of your abdomen)
- Peritoneal cavity

Where can germs be introduced?¹

- The exposed or opened end of the transfer set
- Connections to solution bags, including connections to the tubing
  - This can occur during initial set-up of the device or if you disconnect temporarily at night
- Solution bag after the pull ring is removed
- Medication port (if medication is added to the solution bag)
When and How to Wash Your Hands

Hand washing is the most important way to protect your catheter, exit site, and peritoneal cavity from germs to help prevent infection.²

Remember to always wash your hands before:
• Performing exit site care
• Gathering your supplies
• Setting up your APD cycler/performing your manual CAPD exchange
• Before connecting to start your CAPD exchange or APD cycler
• Before disconnecting from your CAPD exchange or APD cycler

What does good hand washing mean?³

1. Use plenty of clean running water and liquid soap in a pump dispenser. Use a recommended pump soap:

2. Use good friction and wash well between your fingers and underneath your nails. Rub your hands vigorously when washing.

Wash hands for seconds.

3. Dry your hands completely with a disposable paper towel.

4. Use a paper towel to turn off the faucets.

Your PD nurse will teach you the correct method for washing and drying your hands.

Remember, hand washing makes your hands clean, NOT sterile. After hand washing, you should only touch your PD supplies and equipment. If you touch something else, wash and dry your hands again or use hand sanitizer.
When and How to Use Hand Sanitizer

Sometimes you may need to touch something after you have washed your hands and before your PD treatment. Use alcohol-based hand sanitizer to keep your hands as clean as possible.

Use hand sanitizer before you disconnect, after your PD exchange is completed.

How to use hand sanitizer

Follow these 3 steps:

1. Apply a palmful of alcohol based sanitizer product in a cupped hand and cover all surfaces.
2. Rub hands backwards and forwards and switching top and bottom hands, making sure all surfaces are covered.
3. Once dry, your hands are safe. Hand rubbing with alcohol-based sanitizer should take at least 20–30 seconds.
How to Set Up Your Home for CAPD

Talk with your PD nurse about getting your home ready for PD. Your nurse may visit you at home before or shortly after you begin CAPD. Here are things to consider for setting up CAPD in your home:4,5

- **Table/surface** for performing an exchange.
- **Storage of supplies.** Solution bags must be stored in a clean, dry area without excessive heat or cold. The recommended room temperature for storage is 77°F/25°C.2 In addition, you need space to store your disposable supplies.
- **A good source of light.** You need to see clearly when you use aseptic technique to connect and disconnect during your treatment. Aseptic technique helps reduce the risk of contamination.
- **Access to a phone.** A phone should be available so you can call your PD nurse or Baxter with questions.
- **An IV pole** or a place to hang your solution bag.
How to Set Up Your Home for APD

Talk with your PD nurse about getting your home ready for PD. Your nurse may visit you at home before or shortly after you begin APD. Here are things to consider for setting up APD in your home:

- **Location.** Set up the cycler in your bedroom or next to your preferred sleeping area. This should be a quiet place where you can avoid distractions.

- **Table/surface.** The table/surface that holds the cycler should be the same height as you when you are lying in your bed.\(^7\)

- **Storage of supplies.** Solution bags must be stored in a clean, dry area without excessive heat or cold. The recommended room temperature for storage is 77°F/25°C.\(^4\) In addition, you need space to store your disposable supplies.\(^4,5\)

- **A good source of light.** You need to see clearly when you use aseptic techniques to connect and disconnect during your treatment. Following proper aseptic technique helps reduce the risk of contamination.\(^7\)

- **Access to a phone.** A phone should be available so you can call your PD nurse or Baxter with questions.\(^7\)

- **Electrical outlet.** Check for the location of an electrical outlet to plug in your cycler. The outlet must be grounded.\(^7\)
  - Use of extension cords is not recommended. If necessary, only three-prong, heavy-duty extension cords (no longer than 12 feet) rated for at least 1,200 watts should be used.\(^7\)
Other things to remember when preparing for PD:

- Find a quiet place where you can avoid distractions.
- Location of closest bathroom, toilet, bathtub, or shower. Used solution is drained into the toilet, bathtub, or shower during your treatment so you must consider their proximity when setting up your home for PD. A drain line extension or drain bag can be used if needed. Your nurse can give you more information about this.
- Do not allow pets in the room.
- Close doors, vents, and windows.
- Turn off fans.
- Use germ-killing cleanser to clean the counter or table top where you do your connections. Cleaning agents can include disinfecting wipes, mild household cleaner, bleach and water, or soap and water.
- Keep your clothes, bedding and equipment clean.
- Perform catheter care as instructed by your PD nurse.
- Do not cough or sneeze on sterile supplies.
- Wear a mask when connecting and disconnecting to your APD cycler or CAPD exchange.
- You can wipe down the exterior of the cycler with a damp cloth, using mild soap and water. The cycler should be turned off and unplugged prior to being cleaned.

Remember, you can travel with CAPD or your automated cycler. Use the same room set-up guidelines you use at home and be sure to follow aseptic technique.
What to Do About Accidental Contamination

**Problem:** You accidentally touched the sterile connection at:
- The solution bag connectors (luer)
- The tubing that connects to the solution bags

**Action:**
- Throw away the supplies and start again with new sterile supplies.

**Problem:** You touched or dropped the open/exposed end of your transfer set.

**Action:**
- Close your transfer set clamp and put on a new MiniCap disconnect cap.
- Call your PD nurse, as directed.
- A nurse may need to change the transfer set.

**Problem:** You dropped or touched the inside (sponge) of the disconnect cap.

**Action:**
- Throw away the MiniCap disconnect cap and start again with a new disconnect cap.
New Words

**Aseptic technique**
A series of steps to keep an area as germ-free as possible.

**Clean**
Free from dirt, but not germ-free.

**Exit site**
The skin area surrounding your peritoneal catheter where it comes out of your abdomen.

**Germ**
An organism that cannot be seen but causes disease.

**Infection**
Disease caused by coming in contact with germs.

**Sterile**
Completely free of germs.
CAPD Training: Patient Training Self-test

Keeping Clean and Setting Up

1. Hand washing is the most important way to protect yourself from germs and help prevent infection.
   - True   - False

2. You should wash your hands before you do which of the following?
   a. Do your exit-site care
   b. Gather your supplies
   c. Connect and disconnect from your CAPD exchange or APD cycler
   d. All of the above

3. Good hand washing means you must do which of the following?
   a. Use plenty of clean running water and liquid soap in a pump dispenser
   b. Wash well between your fingers and underneath your nails
   c. Rub your hands vigorously
   d. Dry your hands completely with a disposable paper towel
   e. All of the above

4. After hand washing, your hands are clean, not sterile.
   - True   - False

5. If you rub your eye after washing your hands, you should wash and dry your hands again or use hand sanitizer.
   - True   - False

6. To use hand sanitizer correctly, you should do which of the following?
   a. Apply enough hand sanitizer to cover and clean both hands
   b. Rub your hands together thoroughly
   c. Use enough hand sanitizer to last for at least 20-30 seconds
   d. All of the above

7. It is important that you do your PD treatment as you were trained to help keep germs from entering your peritoneal cavity.
   - True   - False

8. Contamination can occur at connections to the solution bags and tubing.
   - True   - False

9. You should use hand sanitizer when you touch things after washing your hands with soap and water, and before starting your PD treatment.
   - True   - False

10. Pets should not be in the room at any time when PD procedures are performed.
    - True   - False

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11. What should you do if you accidentally touch the sterile connection at the end of the tubing that connects to the solution bags?
   a. Continue the exchange
   b. Throw away the supplies and start again with new supplies
   c. Call your PD nurse

12. What should you do if you drop or touch the inside of the MiniCap disconnect cap?
   a. Continue the PD treatment
   b. Throw away the cap and start again with a new one
   c. Call your PD nurse

13. Which of these factors need to be considered in setting up PD in your home?
   a. Height of table that holds the cycler
   b. Electricity outlet and location
   c. Location for drainage of fluid
   d. Good lighting
   e. All of the above

14. You should do your PD exchanges in a clean room without distractions and give all your attention to what you are doing.
   True  False

15. During the summer, you may leave the windows open or the fan on while you set up for your PD treatment.
   True  False

16. You should store your solution bags in an area without excessive heat or cold.
   True  False

Patient Signature: __________________________________________
Date: ____________________________

Answers: 1–True, 2–d, 3–e, 4–True, 5–True, 6–d, 7–True, 8–False, 9–True, 10–True, 11–b, 12–b, 13–e, 14–True, 15–False, 16–True

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PD Training: Patient Checklist

Keeping Clean and Setting Up

Patient Name: ________________________________________________________________
Person Trained: ______________________________________________________________
Relationship to Patient: _______________________________________________________
Completed by (Signature): ___________________________ Date: ___________________

Patient Training/Retraining Checklist Instructions

• The Patient Training Checklist should be used to help track the patient’s progress while being trained, to refresh the learning of a current patient/caregiver or to retrain a returning patient.
• Place the date in the appropriate box as the patient verbalizes understanding of a topic or successfully completes a return demonstration of a procedure.
• If the topic is not applicable (N/A) to the patient, place the date in the N/A column.
• Use Notes section as needed to indicate future training needs.

Keeping Clean

<table>
<thead>
<tr>
<th>Patient demonstrates or verbalizes understanding of:</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
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<tbody>
<tr>
<td>Always wash and dry hands before</td>
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<tr>
<td>• Doing exit-site care</td>
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<td>• Gathering your CAPD supplies/setting up your APD cycler</td>
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<td>• Connect and disconnect from your CAPD exchange/APD cycler</td>
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Baxter Empowers.
<table>
<thead>
<tr>
<th>Patient demonstrates or verbalizes understanding of:</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>Patient demonstrates steps of correct hand washing</td>
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<tr>
<td>• Use clean running water and liquid soap in pump dispenser</td>
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<td>• Wash well between fingers and underneath nails</td>
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<td>• Rub hands vigorously</td>
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<td>• Dry hands completely with disposable paper towel</td>
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<td>• Use paper towel to turn off faucets</td>
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<tr>
<td>After hand washing, be careful what to touch</td>
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<tr>
<td>• Hand washing makes the hands clean, not sterile</td>
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<tr>
<td>• After hand washing:</td>
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<tr>
<td>- Touch only PD supplies and equipment</td>
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<td>- If you touch something else, wash and dry your hands again, or use hand sanitizer</td>
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<tr>
<td>Use of hand sanitizer</td>
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<tr>
<td>• Alcohol-based hand sanitizer can be used after hand washing if you touch something other than your PD supplies</td>
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<tr>
<td>• Patient demonstrates correct use of hand sanitizer</td>
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<tr>
<td>- Apply enough hand sanitizer to cover and clean your entire hand</td>
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<td>- Rub hands together thoroughly</td>
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<tr>
<td>- Rub hands together until they are dry</td>
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<tr>
<td>Clean Environment for PD</td>
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<tr>
<td>• These words describe the clean environment needed for PD</td>
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<tr>
<td>- Clean — You have removed most, but not all, germs</td>
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<td>- Sterile — Item is free of germs</td>
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<tr>
<td>- Aseptic technique — Reduces risk of contamination of sterile PD equipment</td>
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<tr>
<td>- Contamination — Happens when germs are introduced into a clean or sterile object or environment</td>
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</tbody>
</table>
Patient demonstrates or verbalizes understanding of: | Yes | No | N/A
---|---|---|---
**Good cleanliness technique helps keep germs out of peritoneal cavity**
- Wear a mask when connecting and disconnecting to your APD cycler or when doing a CAPD exchange
- Wash and dry hands before every treatment
- Don’t cough or sneeze on supplies
- Keep pets out of room during PD, off your bed, and away from supplies
- Perform catheter care as instructed by your PD nurse
- Keep clothes, bedding, equipment clean
- Routine cleaning of cycler

**Areas where contamination can occur**
- Connections to solution bags, including connections to the tubing
- Solution bag after pull ring is removed
- Medication port (if medication is added to solution bag)

**Problems with accidental contamination and what to do**
- Sterile connections are touched: Throw them away, start with new supplies
- Open end of transfer set is touched or dropped: Close clamp, cap it, and call PD nurse, as directed
- Inside of disconnect cap is dropped or touched: Throw out, then start again with new disconnect cap

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**Setting Up for PD Treatment in Your Home**

Patient demonstrates or verbalizes understanding of: | Yes | No | N/A
---|---|---|---
**Things to consider at home for PD Treatment**
- Table/surface for performing an exchange or to hold PD cycler
- Storage for PD supplies
- Good source of light
- Access to a phone
- IV pole or place to hang solution bag for PD exchange

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Patient demonstrates or verbalizes understanding of:  

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<th></th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
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<tbody>
<tr>
<td>• Location of grounded electrical outlet for PD cycler</td>
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<tr>
<td>• Location of toilet, bathtub, or shower for solution drainage</td>
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</table>

Other requirements for the room:

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<th></th>
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<tbody>
<tr>
<td>• Room should be quiet and distraction-free</td>
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<td>• No pets in the room</td>
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<td>• Doors, vents and windows closed</td>
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<tr>
<td>• Fans turned off</td>
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<tr>
<td>• Germ-killing cleanser used for counter or table top where exchange is being performed</td>
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<tr>
<td>• You can travel with PD. Use the same room set-up guidelines as at home and follow aseptic technique</td>
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Final Checks:  

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<td>New words reviewed</td>
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<td>Self-test completed</td>
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Patient Signature: ____________________________  Date: ____________________

Notes

(If topic not completed or retraining required, specify reason. Procedure training may be documented if applicable.)
References


