

MAIN LINE HEALTH



Sepsis

YOUR ROAD TO RECOVERY



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Things you can do:

- Understand sepsis.
- Act early for signs of infection.
- Take all your medications (including antibiotics) as prescribed by your doctor.
- Keep all doctor appointments.
- Use oxygen, if ordered by your doctor.
- Stop smoking.
- Monitor how you feel.
- Stay active.
- Follow care instructions for lines, drains or catheters.

What is sepsis?

- Sepsis is a life-threatening medical emergency caused by infection.
- Infections can come from any area of the body. This includes the urinary tract, lung, digestive tract or skin.
- Timely treatment is needed to prevent organ failure and death.

What causes sepsis?

- Having any infection can put you at risk for developing sepsis.
- Most infections are related to bacteria.
- Some infections could be caused by viruses (COVID-19, flu) or fungal infections.

Who is at greatest risk for sepsis?

- Elderly (age 65+) or children (<1 year)
- People with severe illness, surgery or hospitalization
- People who had sepsis previously
- People with weakened immune systems
- People with chronic medical conditions such as diabetes, lung disease, kidney disease or cancer
- People who are currently or recently pregnant

Sepsis survivors should talk to their doctor about vaccinations.

As you recover from sepsis, what can you expect?

- Memory loss, confusion, poor concentration
- Anxiety and depression
- Weakness, fatigue, difficulty completing normal life tasks
- Trouble sleeping
- Weight loss and poor appetite
- Feeling short of breath or coughing
- Body aches and pains
- Skin changes, brittle nails, hair loss
- Medical setbacks from chronic conditions of the heart, lung or kidney

What can you do to help recover at home?

- Set small, achievable goals each week.
- Rest and rebuild strength.
- Talk about how you are feeling.
- Eat a balanced diet.
- Make a list of questions for your doctor and care team.

Sepsis survivors who see their doctor and accept home health are 41% less likely to be rehospitalized!

After hospitalization – how can you support your recovery?

- Home health will visit you within two days after discharge and make a second visit within seven days.
- Make an appointment with your doctor within seven days after discharge.

What is home health?

Nurses deliver medical care to patients in their homes. They can:

- Monitor vital signs
- Look for concerning symptoms of worsening infection
- Manage medications and treatment
- Provide wound care and dressing changes
- Care for lines, drains and catheters
- Create an individual plan of care for your recovery



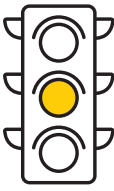
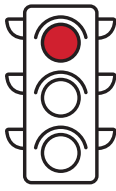
My daily check

The risk of infection – and sepsis – is higher after recovery.

Survivors can use this stoplight every day to spot infections early.

SIGNS OF INFECTION AND SEPSIS AT HOME

Common infections can sometimes lead to sepsis. Sepsis is a deadly response to an infection.

	 Green zone No signs of infection.	 Yellow zone Take action today. Call:	 Red zone Take action today. Call:
Are there changes in my heartbeat or breathing?	• My heartbeat is as usual. • Breathing is normal for me.	• Heartbeat is faster than usual. • Breathing is a bit more difficult and faster than usual.	• Heartbeat is very fast. • Breathing is very fast.
Do I have a fever?	I have not had a fever in the past 24 hours and I am not taking medicine for a fever.	Fever is between 100°F to 101.4°F.	Fever is 101.5°F or greater.
Do I feel cold?	I do not feel cold.	• I feel cold and cannot get warm. • I am shivering or my teeth are chattering.	• Temperature is below 96.8°F. • Skin or fingernails are pale or blue.
How is my energy?	My energy level is as usual.	I am too tired to do most of my usual activities.	• I am very tired. • I cannot do any of my usual activities.
How is my thinking?	Thinking is clear.	Thinking feels slow or not right.	My caregivers tell me I am not making sense.
Are there changes in how I feel after a hospitalization, procedure, infection or change in wound or IV site?	• I feel well. • I had pneumonia, a urinary tract infection (UTI) or another infection. • I had a wound or IV site. It is healing.	• I do not feel well. • I have a bad cough. • My wound or IV site looks different. • I have not urinated (peed) for five or more hours. When I do urinate (pee) it burns, is cloudy or smells bad.	• I feel sick. • My wound or IV site is painful, red, smells or has pus.

Managing lines, drains, tubes, wounds and catheters

Type	What do I look for? Signs and symptoms	Who do I call and what should I do?
Foley catheter and suprapubic catheter	Cloudy urine, urine coming out around the catheter, foul smell when emptying, bloody urine, lower abdominal pain No urine in your foley for six to eight hours	Primary care and/or urologist if you are an established patient Go to the emergency room.
Tubes/drains Jackson Pratt, feeding tubes (PEG), ilioconduit, drainage tube from skin (nephrostomy, cholecystostomy) medication:	Redness around the site, warmth, pain/tenderness, change in drainage color or consistency Drain falls out	Call the clinician that placed your tube or drain. This may be a surgeon or an interventional radiologist. If the drain falls out, call your doctor or go to the emergency room.
Wounds	Change or increase in drainage, increased redness, tenderness, warmth, development of a foul smell, fever, chills, pain	Call the clinician managing the wound or your doctor.
IV insertion sites Peripheral, midline, PICC and metaport	Redness, warmth, coldness around site, swelling, pain, red streaks, unable to flush, bleeding	Call the infusion team.
Dialysis access (Perma-cath, fistula, graft)	Swelling, redness, bleeding, pain	Call vascular surgery or go to the emergency room.

Getting ahead of sepsis

- Practice good hygiene and hand-washing.
- Manage your chronic conditions with your doctor.
- Get recommended vaccines.
- Look out for symptoms of infection.
- Eat healthy foods.
- Keep wounds, drains, catheters and IV sites clean.



ACT FAST and get medical care IMMEDIATELY if you suspect sepsis or have an infection that is not getting better. TIME MATTERS!

Resuming activity

- Walk at a slow, comfortable pace.
- Have chairs placed throughout your home to allow rest stops.
- Use a rolling cart to transport items.
- Consider using a walking aid (walker or cane).
- Consider use of a shower chair or handheld showerhead.
- Perform grooming tasks seated if fatigued.



What is postsepsis syndrome?

Postsepsis syndrome (PSS) affects up to 50% of sepsis survivors. It includes physical and/or psychological long-term effects, such as:

Physical	Psychological or emotional
• Difficulty sleeping, either difficulty getting to sleep or staying asleep • Fatigue, lethargy • Shortness of breath, difficulty breathing • Disabling muscle or joint pain • Swelling in the limbs • Repeat infections, particularly in the first few weeks and months following the initial bout of sepsis • Poor appetite • Hair loss • Skin rash	• Hallucinations • Panic attacks • Flashbacks • Nightmares • Having a hard time thinking • Loss of self-esteem • Depression • Mood swings • Difficulty concentrating • Memory loss • Post-traumatic stress disorder (PTSD)

Is there help available for postsepsis syndrome?

Yes!

Resources may include referrals for:

- Emotional and psychological support (counseling, cognitive behavioral therapy or neuropsychiatric assessment)
- Physical support such as physical therapy, occupational therapy, speech therapy or neurorehabilitation
- Home health care

Medications for sepsis

Types of medicines you may be taking

Medication	Purpose	Common side effects
☐ Antibiotic My medication: _____	Treats and fights bacterial infections It is important to take the full course of antibiotics prescribed (even if you are feeling better).	Abdominal discomfort, diarrhea, nausea, vomiting Skin rash
☐ Antiviral My medication: _____	Treats and fights viral infections	Abdominal discomfort, diarrhea, nausea, vomiting Skin rash Dizziness, drowsiness, headache
☐ Antifungal My medication: _____	Treats and fights fungal infections	Abdominal discomfort, diarrhea, nausea, vomiting Skin rash, itching skin Liver damage, yellowing of skin
☐ Acetaminophen (Tylenol®)	Treats fever, headache and pain	Only take as directed; check with your doctor if you have liver disease.

Please do not start any new medications until you talk to your doctor.

If you are concerned about any side effects, please contact your doctor.

You may require lab work while taking medicine to treat sepsis. Please follow your discharge instructions regarding any further lab work that is needed.

Medications for other conditions

Patients with other chronic conditions, particularly conditions of the heart, lungs, liver, or kidneys, and people with diabetes are at increased risk of another infection and being hospitalized after sepsis.

Some of your medications may have been changed or held when you left the hospital. This is often done to allow your body systems to recover from injury after sepsis. Please keep your list of medications with you and bring them to any doctors' appointments.

Many of these medications need to be restarted or adjusted soon after you return home.

It is important to **follow up with your doctor within one week** of leaving the hospital.



CALL YOUR DOCTOR:

if you gain 3 pounds or more in one day or 5 pounds or more in one week.

Patients with heart failure

Your heart may not pump as well as it should. This can lead to extra fluid buildup in your lungs or swelling in your body. Heart failure patients have a high risk of rehospitalization.

Your diuretic “water pill” medication may have been changed or stopped after you had sepsis.

If your weight goes up, this may be a sign of too much fluid. You may also notice swelling in your legs and stomach or trouble breathing.

PLEASE WEIGH YOURSELF DAILY!

- First thing in the morning after using the bathroom and before you eat
- Use the same scale and write down your weight every day.

Lung infection (pneumonia)

As your body works to fight an infection, various organs can be impacted, including the lungs. In some cases, the infection that causes sepsis may originate in the respiratory system, such as from pneumonia. Conversely, sepsis can impair the body's ability to clear infections, making individuals more susceptible to secondary infections like pneumonia.

- You may continue to cough for days to weeks as you recover. It should continue to improve, then go away.
- You should treat your cough only if it keeps you from sleeping or eating. Your doctor will make suggestions for other medications, if needed.
- The best way to treat a cough is by staying well-hydrated.



WHAT ELSE CAN I USE FOR MY COUGH?

- Throat lozenges
- Honey
- Tea



- Check with your doctor regarding your vaccines. We have vaccines to reduce the risk and severity of pneumonia.
 - Haemophilus influenza, pertussis, pneumococcal, COVID-19, influenza (flu), respiratory syncytial virus (RSV).
- Please follow instructions for oxygen use and incentive spirometer use at home, if needed.
- Quit smoking.
- Limit alcohol use.

Aspiration pneumonia

Aspiration pneumonia occurs when food and liquid go into the lung when swallowing. Some people may cough or need to clear their throat during or after eating. Some people have no symptoms. Aspiration increases the chance of pneumonia.

- You may be given a specialized diet and instructions on body position to give you the best chance to swallow correctly.
- You may be asked to follow up with a speech therapist to work on improving your swallow.

Urinary tract infection

- An infection in the bladder, urethra or kidney. Infection often happens when bacteria from the skin or the rectum travel into the urinary tract.
- You may have burning or pain when you urinate. Sometimes, you may notice blood in the urine.
- If the infection has spread to the kidney, you may also have back pain, fever, nausea and vomiting.

RISK FACTORS:

- Previous urinary infections
- Recent sexual activity
- Chronic bladder catheters
- Enlarged prostate gland
- Menopause
- Older adults, children and pregnancy

PREVENTION:

- Stay well-hydrated.
- Urinate after sexual activity.
- Avoid douches, sprays or powders near the genital area.
- For women/girls, wipe front to back.



PATIENTS WITH A URINARY CATHETER SHOULD:

- Understand why they need the catheter
- Frequently ask their doctor if the catheter is still needed
- Wash hands before and after touching the catheter
- Check to make sure the urine bag is below the bladder
- Avoid tugging, pulling or twisting the catheter tubing
- Follow instructions for catheter care

Skin infections

- An infection of the skin that may cause breaks in the skin surface or cause wounds.
- You may have instructions to care for your healing wound.

RISK FACTORS:

- Injury to the skin
- Radiation therapy
- Fluid buildup in the legs. This can be due to poor circulation, lymph node injury, heart failure, liver and kidney disease.
- Being overweight
- Chronic skin conditions (such as eczema or dermatitis)
- Diabetes
- Older adults, children and pregnancy.

CARE SUGGESTIONS:

- Prop the painful body part on pillows to keep the area elevated. This can help improve pain and swelling.
- Keep the surface clean and dry.
- Do not squeeze, scratch or rub the skin surface.
- Gently wash the area with soap and water, pat the area dry with a clean towel.
- Wash your hands before and after touching the area or changing a dressing.



PATIENTS WITH CHRONIC CONDITIONS:

- **Diabetes:** Good control of your sugar levels is important to the healing process. You may have less feeling and sensation in your feet. It is important to follow up with podiatry (foot doctors) for foot and nail care. They also monitor wounds.
- **Heart failure:** Reducing swelling in your legs can help prevent wounds from developing. Following up with your cardiologist (heart doctor) can help in monitoring your need for a water pill to improve leg swelling.
- **Circulation and blood flow issues:** This can lead to wounds. It is important to follow up with your vascular team.

Resources

SEPSIS ALLIANCE

Nonprofit organization that provides information and support

sepsis.org

CENTERS FOR DISEASE CONTROL (CDC)

Our national science-based public health and community services for disease

cdc.gov/sepsis

Outpatient cardiac rehabilitation

Main Line Health Broomall

Lawrence Park Shopping Center
1991 Sproul Road
Broomall, PA 19008
484.565.1293

Main Line Health Concordville

1020 Baltimore Pike
Glen Mills, PA 19342
484.565.1293

Main Line Health Exton Square

154 Exton Square Parkway
Exton, PA 19341
484.565.1293

Main Line HealthCare Wynnewood

306 East Lancaster Avenue, Suite 200
Wynnewood, PA 19096
484.565.1293

MAIN LINE HEALTH HOMECARE & HOSPICE

Our home health nurses and therapists have advanced training to help you manage your recovery. Our team will focus on your goals of care and create a plan that keeps you healthy. We also offer:

- Tips on using your medications and antibiotics safely
- Help with using oxygen safely in your home
- Help with managing lines, drains, catheters and wounds
- Customized therapy and rehab program
- Tips that help you avoid trips to the hospital

Our home health team sees patients in Delaware, Chester, Montgomery and Philadelphia counties. If you live in other areas, we can find a home care agency in your neighborhood.

To learn more about Main Line Health Home Care, Hospice and palliative services, call **484.580.1601** or visit mainlinehealth.org/homecare.

SmokeFREE PROGRAM

This is a free, state-approved program consisting of six sessions designed to help smokers quit and addresses the physical and psychological habit of smoking.
484.227.FREE (484.227.3733).

PA FREE QUITLINE

This is a free program that provides coaching over the phone to help you quit smoking. **1.800.QUIT.NOW (1.800.784.8669)**

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mainlinehealth.org | 1.866.CALL.MLH

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