

# What is Post Intensive Care Syndrome (PICS)?

Post-intensive care syndrome (PICS) is a group of problems that people can experience after surviving a life-threatening illness. More than half (50 percent) of all people who survive a hospital stay in the intensive care unit (ICU) will have at least one of the problems seen with PICS. These problems can greatly affect the lives of survivors of critical illness. Problems can be physical or mental and may affect one's ability to think or function in daily life. Many patients are unable to return work and do not have the same energy level that they had before their illness. This fact sheet will review common problems seen with PICS as well as ways to try to prevent and treat these problems.



"I have had problems associated with PICS since 2008. I have had issues in all areas: physical, mental and cognitive in one way or another. I have always found it striking when talking to my fellow survivors how much variability there is in how people copy with the problems associated with PICS. One person can still function and work, while another patient who was only hospitalized

for three days in the intensive care unit (icu) will not leave her home. Some people's entire life may be destroyed by fear. Based upon my own and others' experiences, I advocate for early physical therapy and humanizing the ICU as much as possible.

I was fortunate that my family, and even my hairdresser and massage therapist were able to visit often, which helped me to feel less anxious and feel better emotionally and physically. We stopped the sedation while I was still on the ventilator, so I was able to think more clearly, communicate, start PT, and even use my cell phone and laptop once I had regained some strength. It is also very helpful to work with your healthcare team to create a schedule so that you can do all of the "work" during the daytime, and sleep at night without interruptions. We need to help patients and families have a menu of strategies to manage stressors during and after the ICU and hospital stay. The sooner a patient starts to think, communicate, and be more physically active, the sooner he or she will start to feel like him or herself again."

*Susan East, ARDS Survivor and Patient Advocate.*

For more about Susan's story, see: <https://www.thoracic.org/patients/par/par-publications/patient-voices6/resources/11-east.pdf>

## What kinds of problems are seen with PICS?

There are three main kinds of problems:

- physical function
- mental health
- cognitive function

Physical symptoms include weakness, pain, shortness of breath, and difficulty with movement or exercise.

Mental health symptoms range from mild anxiety or irritability to severe depression, sleep disturbances, and post-traumatic stress disorder.

Cognitive changes include difficulty thinking, remembering, or concentrating.

People who develop PICS can experience any combination of these physical, emotional, and cognitive symptoms. They may be entirely new problems, or worsening of problems that were present before the critical illness.

## How can you tell if a person is having problems from PICS?

PICS is likely when a person is having new or worsening physical, mental health, or cognitive symptoms following

a critical illness. A healthcare provider may notice these symptoms by asking a person or his or her caregiver specific questions about how he or she is doing. There are also formal tests that may provide more information about the severity of symptoms. Walking tests or other measures of strength and endurance can check for physical problems. Lung function testing checks for breathing problems. Healthcare providers often use questionnaires to ask about anxiety, depression symptoms, breathlessness, the ability to complete daily tasks (such as bathing), and a person's overall quality of life. There are no specific blood or radiology tests to diagnose PICS. Your healthcare provider may advise some tests to check for other health conditions needing to be treated.

## Who gets PICS?

PICS can affect any person who survives a critical illness, even people who were healthy prior to their severe illness and hospital stay. PICS is most common among people who were admitted to an ICU, but many people treated outside of the ICU can develop this condition. People who had existing health problems, such as lung disease or muscle disorders, prior to a hospitalization are at higher risk of developing PICS. People with psychiatric illness or cognitive impairment (dementia) are also more likely to have worsening of their

symptoms after an ICU stay. Some types of illnesses and events that may occur in the hospital may also increase a person's risk of developing PICS. For example, people who have severe infections, acute respiratory distress syndrome, delirium, low oxygen levels, and/or low blood pressure during their illness are more likely to have PICS.

### Can PICS be prevented?

Several things can be done during a hospitalization that may reduce the risk of developing PICS. If a person needs breathing support, the healthcare team will try to minimize time on the mechanical ventilator and use as little sedating medication as is safe. Physical therapy can be started early during an illness even while other intensive medical therapy is going on. Family members and healthcare providers can keep a diary of events that happen in the hospital to help patients link memories they have to the care they received. Having family and friends talking with the patient, bringing in music and pictures from home, and being with the patient may also help the healthcare team's efforts.

### How is PICS treated?

Treatment for PICS depends on the specific symptoms. Weakness and deconditioning can be treated with physical therapy and exercise programs. Mental health symptoms such as depression or anxiety can be treated with a combination of therapy and medications. If cognitive impairment results in difficulty thinking, remembering, or concentrating, a formal evaluation by a neurocognitive specialist may help. Occupational therapy may help ICU survivors manage these new difficulties and improve symptoms. Several multidisciplinary clinics now exist to provide support for patients after critical illness, and primary care physicians should be educated about and involved in this complex care. Treatment plans may involve several professionals working as a team. Social workers, pharmacists, physical therapists, occupational therapists, nurses, and physicians may each contribute to the recovery process. Clinicians do not have all the answers for helping patients recover from PICS and adapt to new problems. Sometimes patients and their caregivers may find it helpful to share stories with each other—both to get advice, and for the benefits of being able to help others with the things they have figured out.

### Does PICS resolve?

PICS symptoms are often present six months to one year after a hospitalization. Every person will have a different recovery process. Some symptoms may improve or resolve completely within weeks, while other symptoms may improve slowly or persist for years. Even if symptoms do not improve, healthcare providers are able to support people as they adjust to a new level of functioning after critical illness. PICS may greatly alter the quality of life for people and their caregivers. Some people are not able to return

to work or the same type of work after critical illness. They may have financial challenges including difficulty paying for medications.

### Does PICS affect caregivers?

Yes. Critical illness can be difficult for family members and other caregivers. This difficulty can extend after the loved one is discharged from the hospital. Caregivers can develop depression, anxiety, or post-traumatic stress disorder. It is important that caregivers find time to take care of themselves, ask for support when they need help, and work with their own healthcare providers to manage any symptoms they may have.

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## Rx Key Points

- ✓ PICS can cause physical, emotional, and cognitive symptoms after a severe illness.
- ✓ Your healthcare provider may diagnose PICS based on the symptoms you have after leaving the hospital.
- ✓ The symptoms of PICS can last months to years.
- ✓ PICS can also affect family members and other caregivers.
- ✓ Work with your healthcare team and your caregivers to develop a treatment plan.

**Healthcare Provider's Contact Number:**

## Resources

### THRIVE Initiative: Redefining Recovery

- <https://www.sccm.org/MyICUCare/THRIVE/Post-intensive-Care-Syndrome>

### After the ICU: PICS Online Library

- <https://www.aftertheicu.org/what-is-pics>

### American Thoracic Society

- <https://www.thoracic.org/patients>
  - ARDS
  - Mechanical Ventilation

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