

What is Acute Respiratory Distress Syndrome?

Acute Respiratory Distress Syndrome (ARDS) is a life-threatening illness in which the lungs are severely inflamed. Swelling throughout the lungs causes the air sacs (alveoli) to fill with fluid so oxygen cannot get into the blood. Patients with ARDS need extra oxygen and sometimes need a ventilator to help them breathe. Even with the best care, about 40 percent of people with ARDS die.

Who gets ARDS?

ARDS affects over 150,000 Americans each year. ARDS can occur in many situations. People with medical problems like lung disease have a higher risk of developing ARDS. A person can develop ARDS even if they were previously healthy.

What causes ARDS?

Many things can cause ARDS. Some causes are:

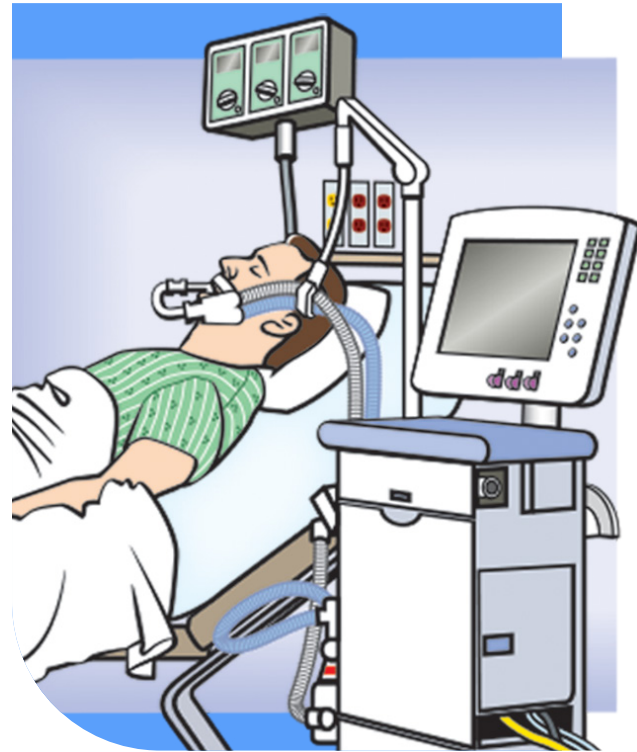
- An infection in the lungs, like pneumonia.
- An infection somewhere else in the body that causes low blood pressure.
- Breathing in smoke or fumes.
- Choking on vomit.
- Bruising of the chest and lungs.
- Severe bleeding requiring transfusions.

What are the symptoms of ARDS?

Common symptoms include shortness of breath, cough (often with white or pink frothy sputum), fatigue, or fever.

How is ARDS diagnosed?

The health care team diagnoses ARDS based on the patient's prior health problems, chest x-ray, and how much oxygen is in the blood.



How is ARDS treated?

The best care for ARDS includes:

- Treating any medical problem that led to the lung injury, and
- Supporting the person's breathing with extra oxygen and possibly machines until the lungs heal.

Treatments for ARDS include:

- Breathing support from a ventilator.
- Medicines to decrease how hard the person is working to breathe.
- Placing the patient face-down (prone) to help the lungs work better.

Patients with ARDS often need to go to the Intensive Care Unit because of how sick they are. (See *Managing the ICU Experience: A proactive guide*)

What complications may occur with ARDS?

There are a number of problems that can occur when a person has ARDS, including:

- Collapse of part or all of one or both lungs (pneumothorax). To re-expand the lung, a chest tube (thoracostomy tube) may need to be inserted.
- Infections that need to be treated with antibiotics.
- Confusion (called ICU delirium which could be from medications, lack of sleep, pain, infections, or lack of oxygen being delivered to the body. This usually improves or resolves with time as the person gets better.
- Damage to major organs (kidney, heart, liver, brain, blood) because of severe infections or lack of oxygen being delivered throughout the body. Sometimes even with intensive care and use of a ventilator, the lungs are too damaged to deliver enough oxygen. Damage to any of the major organs can be very serious and require additional treatment. Having many organs functioning poorly results in a greater risk of death.

Is ARDS deadly?

ARDS is an unpredictable and serious medical problem. Even with the best medical care, almost half of patients die. Some people recover within a short period of time, while others may not recover for weeks or months. The ups and downs of this critical illness may seem like an “emotional rollercoaster” for patients, families and friends. It is important for family and friends to remain hopeful and seek guidance about how they can help promote healing. It is also important that family members take care of themselves to avoid getting too tired or worn down. Talking with the medical team to understand what is happening and what might be expected day to day may be helpful.

After leaving the hospital, the ARDS survivors may need help while recovering at home. They may need oxygen or physical or occupational therapy. They may also have shortness of breath, cough, hoarseness, fatigue, anxiety, depression or post-traumatic stress disorder (PTSD). (See ATS Patient Information Series fact sheet on Post ICU Syndrome.)

A person recovering from ARDS will need check-ups with his or her health care provider, who will monitor his/her improvement, and check his/her lung function on a regular basis. The health care provider

may also refer the person to a pulmonary specialist or a pulmonary rehabilitation program to help him/her regain strength and stamina. ●

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Illustration credit: OurDesigns, Inc.

Action Steps

- ARDS is a serious life threatening problem that requires intensive care.
- Injury to the lungs may be corrected quickly or require weeks to months of treatment.
- It is common for family members and friends of a person with ARDS to have many questions. Write down your questions and talk regularly with the health care team.
- Support your loved one by learning what you can do to promote his/her recovery.

Resources

American Thoracic Society

<https://www.thoracic.org/patients>

- [Chest tube thoracostomy](#)
- [Mechanical ventilation](#)
- [Pneumonia](#)
- [Post ICU syndrome](#)
- [Pulmonary rehabilitation](#)
- [Managing the ICU experience](#)

ARDS Alliance

<https://ardsalliance.org/>

American Lung Association

<https://www.lung.org/lung-health-diseases/lung-disease-lookup/ards>

ARDS Foundation: Facts about ARDS

<https://ardsglobal.org/facts-about-ards-2/>

National Heart Lung and Blood Institute (NHLBI)

<https://www.nhlbi.nih.gov/health-topics/acute-respiratory-distress-syndrome/www.asthmaandlung.org.UK/conditions/asthma>

Doctor's Office Telephone:

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