

Patient information from BMJ

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Acute respiratory distress syndrome

Acute respiratory distress syndrome (ARDS) is a serious condition that affects the lungs. It makes breathing difficult and stops your body from getting enough oxygen. ARDS usually happens to people who are already severely ill in hospital with another illness. Treatments can help many people to breathe normally again. But ARDS can be fatal.

What is acute respiratory distress syndrome (ARDS)?

ARDS happens when tissues in the lungs become inflamed (swollen), which makes it hard to get enough oxygen. The lungs can also partly fill with fluid, making it even harder to breathe normally.

ARDS usually happens as a complication of another condition, such as a serious infection. This means that most people who get the condition are already in hospital. But it can sometimes happen with very little warning: for example, if you get an infection, such as pneumonia, that comes on very quickly.

Many things can cause ARDS. One of the most common causes is sepsis, which happens when the immune system's reaction to an infection harms the body rather than protecting it.

Other causes of ARDS include:

- Breathing in an object that gets stuck in the airway or lungs
- An infection of the pancreas (pancreatitis)
- Physical damage to the lungs from an injury, such as a traffic accident injury
- Burn injuries
- Problems related to blood transfusions
- Drug overdose
- A blood clot in the lungs.

Apart from having a serious illness, things that make ARDS more likely include being a smoker or a heavy drinker.

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What are the symptoms?

The main symptom of ARDS is having difficulty breathing. For example, you might feel the need to breathe very rapidly to get enough air. You might also cough up frothy sputum.

ARDS is usually caused by another condition. But if you have breathing difficulties that come on suddenly before you have been diagnosed with another condition, your doctor will want to find out what could be wrong with you. So you might need a chest x-ray, and tests on your blood and sputum to help pinpoint the cause of your illness.

What treatments work?

Medical staff are familiar with ARDS. So if someone being treated in hospital has any kind of breathing difficulties the doctors and nurses will not be taken by surprise and will know what treatments to try.

Treating the cause

The best way to treat ARDS and stop it happening again is to treat the condition that caused it. For example, one of the most common causes of ARDS is a bacterial infection. These can usually be treated with antibiotics.

Oxygen

Your doctor will want to try to keep your lungs clear of fluid and make sure you get as much oxygen as possible.

To get enough oxygen you might need what's called mechanical ventilation. Your doctor will use a machine to help you breathe through a mask called a respirator. If you are still not getting enough oxygen your doctor might need to pass a tube down your throat to get more oxygen directly to your lungs.

Some people need help getting enough oxygen even with the respirator. For example, they might need a sedative to calm their muscles and nerves, or to be asleep while the machine helps them breathe.

What will happen?

It's important to remember that most people with ARDS are already severely ill in hospital. When people with ARDS die, the cause of death tends to be organ failure caused by their underlying illness, not their breathing difficulties.

ARDS can be controlled in many people. But between one third and one half of people who develop ARDS will not recover and will die.

Younger people have a much better chance of surviving ARDS.

People who recover from ARDS usually have weaker lungs than before the ARDS, although this doesn't always cause symptoms. It is also common to have other problems such as muscle weakness or long-term pain.

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If you have had an episode of ARDS and are worried about long-term effects, talk with your doctor.

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