

Adult Respiratory Distress Syndrome (ARDS)

This fact sheet gives a brief overview of what adult/acute respiratory distress syndrome (ARDS) is.

'ARDS', or 'shock-lung', is a condition in which the lungs suddenly become damaged. Fluid and proteins leak out from the blood vessels into the millions of tiny air spaces in the lung, making the lung stiff. This prevents the lungs from working normally, particularly when transferring oxygen into the blood and getting rid of carbon dioxide. This all makes breathing hard work.

ARDS can be triggered by problems in the lungs themselves: for example by a chest infection or pneumonia, by a clot on the lung, or by a lung injury, for example as a result of a car crash. However, problems in other parts of the body can also trigger ARDS. These include burns, injuries from an accident, infections, a blood transfusion, or even having a baby. Doctors do not understand why illnesses that do not directly affect the lungs lead to ARDS. The process is thought to be that these conditions produce harmful substances, which overwhelms the body's defenses, producing "oxidative stress" and this results in ARDS.

In general, the commonest cause of ARDS is an infection in the lungs or elsewhere. The term 'shock lung' was first used during the Vietnam War when soldiers developed ARDS after severe injuries.

Because your lungs are not working properly, you become short of oxygen, which makes you look blue. As the condition gets worse and the lungs fail, severe lung damage may occur.

Treatment is aimed at getting rid of the cause of the ARDS - for instance, giving antibiotics to cure an infection. Since there is no known treatment for ARDS itself, the rest of the treatment is aimed at supporting the patient while the lungs get better on their own. In general, patients with ARDS need care on an Intensive Care Unit (ICU), and may need the help of a breathing machine (ventilator).

Although doctors are getting better at treating ARDS, about a third of patients will still not survive. For those who get better, the process can take a long time. Some do get better very fast (in days), but others may need support from a breathing machines for weeks and, in rare cases, for months. The lungs may be left scarred and stiff as the ARDS improves. However, people who are successfully treated often recover fully and have normal lungs after six months.

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