Chest-eR®

Chest Emergency Reanimation device

The perfect aid for cardiac massage.

*this device can save a life

The **first Italian device** that assists in cardiac massage practice

International **patent**

Indispensable aid for **proper resuscitation** in complete safety

Unique innovation to protect patients and rescuers

Designed to **reduce the incidence of internal injuries**, Chest-eR is a protective device for chest compressions conceived to improve the quality of cardiac massage in full safety.
It is an **intuitive and easy-to-use** device and is small, c**ompact and lightweight**, and can be used with simple 1.5V batteries.

A professional solution whose patent combines:

• **Non-Newtonian materials** capable of dissipating the impact energy of too violent chest compressions.

• A special three-layer internal structure that **reduces dangerous stresses** produced by incorrect application of force and **redistributes excessive forces** over the entire area of the device.

• Sophisticated algorithms ensure a **luminous electronic feedback system** able to communicate proper execution of the massage in accordance with the international guidelines.

• A single-use protective sheath guarantees **absolute hygiene** and prevents the risk of infections.

Who it is aimed at:

• Rescuers

• Hospital staff

• Common persons

• Educators

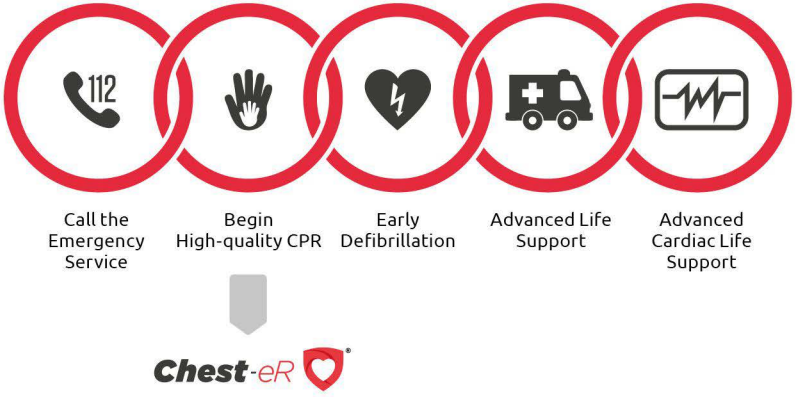
How it works

1. Place Chest-eR on the chest of the patient (as shown in the figure), **press on the pad** and the device will automatically turn on.

2. A **luminous indicator** will show the pressure and compression rate applied for the cardiac massage; a green light indicates that they are correct and a red light that they are incorrect.

3. If the rescuer continues applying force also in the release phase of the massage preventing the chest from returning to its original position, **both the red lights** (at the top and bottom of the scale on the device) come on to warn the rescuer to release the pressure.

4. Once the cardiac massage has been completed, **the device will automatically turn off** after 30 seconds of not using it.



Why use Chest-eR?

Correct cardiac massage compression rate and pressure thanks to the scale with luminous indicator.

The European Resuscitation Council (ERC) and the American Heart Association (AHA) guidelines recommend a compression depth of 50-60 mm (to stimulate blood flow to the brain) while the cardiac massage should be administered at a rate between 100 and 120 compressions a minute.

Chest-eR helps observe these guidelines thanks to the scale with luminous indicator which informs the rescuer on the correct pressure and compression rate applied for the massage.

Reduction of internal injuries and traumas.

In order to reduce the probability of internal injuries and traumas of the patient to be resuscitated, Chest-eR uses the technology of cellular elastomeric materials with non-Newtonian characteristics. When subjected to application of an impulsive force, the soft surface of the device is transformed by rearranging the molecules of which it is composed, immediately stiffening it and creating **a shield capable of dissipating the force of the impact absorbing up to 90% of the energy thus ensuring maximum effectiveness of the cardiac massage.**

Homogeneous force distribution.

The rigid middle layer of the device allows more homogeneously **distributing the forces in the lower sternum area** and, by means of the combined action of the covering capable of adapting to the shape of the chest, **prevents excessive stresses concentrated on any protruding bone structures**.

The special triple-layer structure also reduces - by means of device deformation - transmission to the chest of undesired forces in parallel direction to the chest and protects the rescuer's hands from injury.

REV.1

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CE Medical Device

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