

## MEDICINE

# Air for "Suffocation" Victims

Breathing is the second item to check after bleeding. Artificial respiration may save a life between the interval when breathing stops and the heart stops.

By JANE STAFFORD

*Fifth in a series of atomic first aid.*

► **DIFFICULT** breathing or stoppage of breathing is the second thing you look for, after serious bleeding, when you are called on to give first aid. Oxygen from the air is essential to life. Anything interfering with or cutting off the oxygen supply seriously threatens life.

Certain cells in the brain die within four minutes if deprived of oxygen. The heart may continue beating for a short time after breathing stops. During this interval before the heart stops, you may be able to save life by giving artificial respiration.

## Hands Always Available

Mechanical devices such as inhalators and respirators are often used to restore breathing in cases of suffocation. But these are not always immediately available and the victim may die before they can be gotten to him.

You have a pair of hands and that is all you need to give artificial respiration. Here are directions for the standard method:

1. Lay the patient on his belly, one arm extended directly overhead, the other arm bent at elbow with the face turned outward and resting on hand or forearm. Nose and mouth must be free for breathing.

## Straddle Patient

2. Kneel straddling the patient's thighs with your knees at such a distance from his hip bones as will allow you to place your hands as follows: Palms of your hands on the small of the patient's back, fingers resting on the ribs, little fingers just touching the lowest ribs. Thumbs and fingers should be in a natural position with the tips of the fingers just out of sight.

3. With your arms straight, swing forward slowly so that the weight of your body

is gradually brought to bear on the patient. Your shoulder should be directly over the heel of your hand at the end of the forward swing. Do not bend your elbows. This forward swing should take about two seconds.

4. Immediately swing backward so as to remove the pressure completely.

## Repeat Double Movement

5. After two seconds, swing forward again. Repeat deliberately 12 to 15 times a minute the double movement of compression and release.

6. Continue artificial respiration without interruption until natural breathing is restored or until a physician pronounces the patient dead. You may have to continue it for four hours or longer.

7. As soon as artificial respiration has been started and while it is being continued, have an assistant loosen any tight clothing about the patient's neck, chest and waist.

Keep the patient warm. Do not give any liquids by mouth until he is fully conscious.

After he revives, keep him lying down to avoid strain on the heart.

Watch the patient, because sometimes after natural breathing has started it stops again. Artificial respiration must then be re-started immediately.

If it is necessary to change operators while giving artificial respiration, do it without losing the rhythm of the procedure.

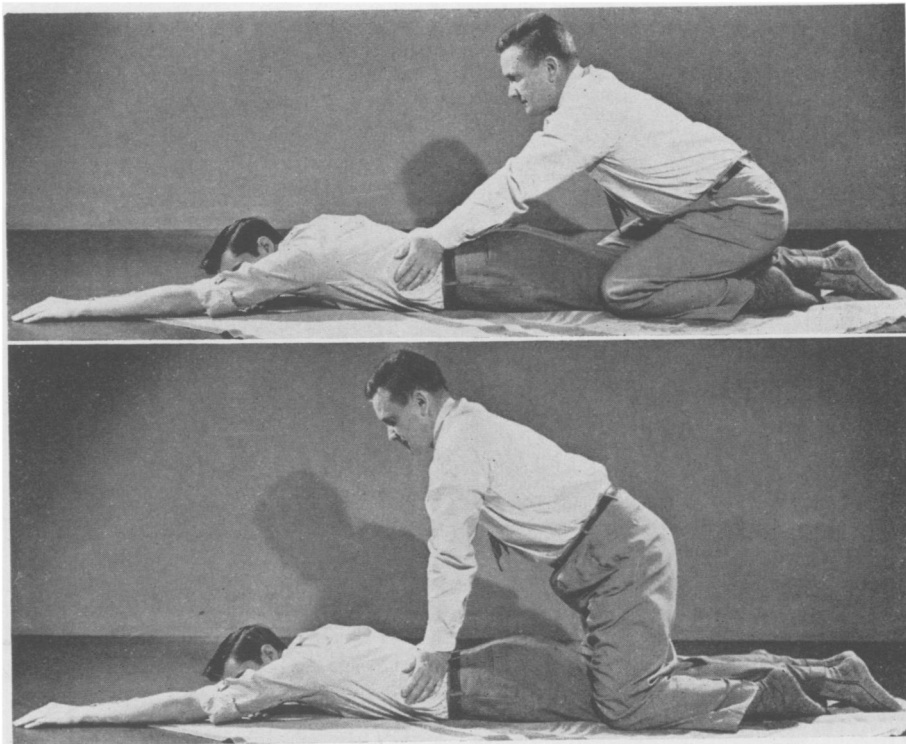
## Sign of Revival

Signs that the patient is being revived by artificial respiration are a fading of the bluish color of the skin and, in fair-skinned persons, a flush of color; twitching of the mouth and "creeping" of the fingertips; and, most encouraging, a sobbing catch of the breath while air is being taken into the lungs.

## Uses Are Many

Most people think of artificial respiration for victims of drowning, gas poisoning and electric shock. Other conditions in which you may need to give it are: compression of the chest, as by the cave-in of buildings, prolonged exposure to the cold, poisoning by sleeping medicines, excessive alcohol, hanging in attempted suicides, choking and puncture wounds of the chest.

Science News Letter, October 28, 1950



**AIR FOR LIFE**—Forward and back positions of the standard artificial respiration technique are shown.

## THE PROSPECTOR

A collection of mineral specimens assembled from hundreds of mine examinations, but chosen from the most recurring types in economic use. 50 mineral ores, size  $\frac{3}{4}$ " plus in compartment box 9 x 12 x 1" with Prospectors Handbook \$4.00 prepaid. Booklet, Introduction to Geology for the Layman 50¢.

Write for free catalogue

**ECKERT** Mineral Research  
Naturegraph Co.

Dept. SNL

110 E. Main St. Florence, Colorado