

We hope you won't need this, but farmers are usually a long way from help so should know the following.

## **Dr. Gabe Mirkin's Fitness and Health E-Zine**

You are in a situation where a person suddenly drops to the floor unconscious. You put your ear over his heart and hear no heartbeats. That person is dead unless you pump on his chest immediately to circulate blood to bring enough oxygen to keep his brain alive, and then shock his heart with an electrical defibrillator to make it start beating again.

He passed out because his brain suffered from lack of oxygen, caused by lack of blood circulating to his brain, caused by his heart fibrillating (shaking rather than pumping) or having a heart beat too weak to pump blood. His brain will die in a minute or two if you don't circulate blood by compressing his chest, and heart will not start beating again unless you shock it as soon as possible, within about ten minutes.

Recent studies show that compressing the chest first is just as successful as using the electrical defibrillator first (BMC Journal, September 2010).

A study of 1,503 patients showed that survival rates were the same for immediate defibrillation and after at least 90 seconds of chest compressions before electrical defibrillation.

Interrupting chest compressions during resuscitation reduces the chances of heartbeat return to normal after electrical shocking (defibrillation). For every second of a pause in compressions there is a one percent reduction in the likelihood of success.

(BMC Medicine, February 6, 2009; Circulation, October 2009.)

Mouth-to-mouth resuscitation is no better than just pressing on the chest (NEJM, July 29, 2010). You may not need to do mouth-to-mouth resuscitation in adults. However, this may not apply to children because of their small lungs.

Place the heel of one hand between the nipples and the other hand on top of that.

Keep elbows straight with your shoulders directly over your hands.

With your upper body weight, push down on the chest two inches deep at 100 compressions a minute.

Continue until signs of movement or until emergency help arrives.

**Print this and keep a copy handy in places it may be needed.**