

## Doctor and the skeptics

I was disappointed in Curt Guyette's report on the use of the Heimlich maneuver for drowning, "Off the deep end" (Metro Times, Dec. 8).

It's impossible to respond point-by-point to a 5,600-word article that accuses me of everything from "chutzpah" to "slander." But in this important debate about saving lives, Mr. Guyette simply gets wrong or doesn't understand several important points.

The failure rate for CPR — a combination of chest compressions and mouth-to-mouth breathing — is staggering in drowning cases. Most death rates are in the 50 percent range. Indeed, in the tragic case of the Detroit youth cited in this story, CPR was the first response. It failed.

Under the best of circumstances, CPR is difficult to perform and requires training. Moreover, the American Heart Association (AHA) says that exchange of saliva has caused herpes and tuberculosis. AIDS is also a concern.

The AHA's own guidelines warn: "Even properly performed chest compressions can cause rib fractures in adult patients ... Other complications may occur despite proper CPR technique, including fracture of the sternum, separation of the ribs from the sternum, pneumothorax, hemothorax, lung contusions, lacerations of the liver and spleen." The AHA has also changed its own guidelines for the use of CPR on heart attack victims, and now recommends that 911 emergency phone operators teach only chest compressions and eliminate mouth-to-mouth. This followed an AHA study that found that mouth-to-mouth resulted in more deaths from heart attacks than just using chest compressions.

The Ellis lifeguard study from 1995-1999 remains the largest human study ever conducted regarding the effectiveness of the Heimlich Maneuver for drowning. One hundred and forty-seven of 152 (97 percent) unconscious, nonbreathing drowning victims were pulled from the water and successfully resuscitated with the maneuver. The vast majority required no further treatment. And yet you assert the maneuver is not "unequivocally the reason" for these rescues. If not the maneuver, then what? You say any response can be effective in a short time. This is tortured logic. It either worked, or it didn't. For 147 drowning victims, the Heimlich Maneuver saved their lives.

The story quotes both Dr. Modell and Dr. Ornato as critics. Your reporter summarizes their arguments as:

1.) Drowning victims don't have much water in their lungs.

Here is Dr. Modell in the New England Journal of Medicine: "Drowning, which is defined as suffocation by submersion, especially in water, occurs without actual aspiration of water in only approximately 7 to 10 percent of victims, while approximately 90 percent aspirate fluid ... active respiration, not passive flow of water, determines the volume of water aspirated." Here is Dr. Ornato in the Journal of the American Medical

Association on the same subject: “In humans, ... breath holding is frequently followed by laryngospasm. Asphyxia eventually causes the glottis to relax and permits the lungs to fill with water in most, not all, humans who succumb to drowning. Ten percent to 15 percent of drowning victims maintain tight laryngospasm until death and do not aspirate ...”

2.) There's no proof the Heimlich expels water from the lungs.

In dog drowning studies at University of Pittsburgh in 1982, Dr. Peter Safar (a CPR advocate) found that four Heimlich Maneuvers quickly expelled all the water from the lungs of drowning dogs. In contrast, with dogs intubated with an endotracheal tube and lying horizontal, Safar reported it took 10 minutes to drain the same amount of water from the lungs of dogs. Brain damage occurs in five minutes. (The Ellis lifeguards found that the Heimlich Maneuver expelled all water after 6-9 seconds.)

More than 1,000 children needlessly die of drowning at home every year, in buckets of water, in bathtubs, and in swimming pools where no lifeguard is present. Usually the first person on the scene is a parent or neighbor. Let's give these people an easily learned, easily performed tool to save their loved ones — the Heimlich Maneuver. —Dr. Henry Heimlich, Cincinnati, Ohio

### **Curt Guyette responds:**

Dr. Heimlich leans heavily on the use of his maneuver by Jeff Ellis & Associates to support his theory that it should be the first response in near-drowning cases. However, the statistics he cites have never been subjected to independent scientific scrutiny. Furthermore, Ellis & Associates stopped using the Heimlich maneuver in 2000 after employing it for five years. It is not my assertion, but rather the company's, that the high success rate it claims to have experienced during that time can't be attributed with any degree of certainty to use of the maneuver.

As for the University of Pittsburgh study involving dogs, the man who conducted it, Dr. Peter Safar, is now dead. However, Safar — regarded as the father of mouth-to-mouth resuscitation — was in direct opposition to use of the Heimlich maneuver for drowning victims. In 1995, he told the Pittsburgh Post-Gazette that what victims needed was air blown into their lungs. “One cannot do this if you're changing positions trying to perform the Heimlich maneuver,” he told the paper.

Regarding Dr. Heimlich's quote from Dr. Modell's study, Modell himself has frequently gone on the record saying that Heimlich is misinterpreting his conclusions.

The bottom line, according to Modell and every other expert physician interviewed for this article, is that the Heimlich maneuver is at best ineffective and at worst extremely dangerous when used in an attempt to help save drowning victims.

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