Blows are back

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Two years ago, the American Red Cross taught Christine Boerner to save a choking adult with abdominal thrusts. Last month, an agency instructor told her the popular lifesaving technique is now only a backup.

"How long have you had back blows?" Boerner asked during a recent employee first-aid training workshop at Power Medical Interventions in Middletown.

She isn't the only one asking that question.

With little public fanfare nearly two years ago, the Red Cross resurrected back blows as the first choking rescue response, reversing its long published guidelines promoting abdominal thrusts - better known as the Heimlich maneuver.

Last year, Red Cross chapters, including the one in Bucks, revamped first-aid education and training materials and started teaching would-be rescuers to use five back blows first and, if that fails, to use five abdominal thrusts and continue using a combination of the techniques until the obstruction is expelled. (The agency doesn't use the term Heimlich maneuver).

The policy change has been called the most significant in decades, with major implications for emergency and first-aid education and training. It's one that has also surprised - and confused - many, including hospital and rescue workers who have long been drilled to use only abdominal thrusts to clear an airway.

Suffocation following choking is the fifth most common cause of accidental death in the United States, according to the National Safety Council.

In 2005, 4,600 choking deaths were reported in the United States, up from 4,185 in 2001, according to the Centers for Disease Control and Prevention. The highest rates were among children and senior citizens, the CDC reported. For every choking-related death, there are more than 100 choking-related visits to emergency rooms.

The Red Cross' return to back blows first hasn't been universally embraced. The American Heart Association, the National Safety Council and other medical groups continue to teach and promote using only abdominal thrusts for conscious choking adults.

Paramedic Joe Hayes said he didn't know about the return to back blows, though his squad - the Bucks County Rescue Squad - and most local rescue squads follow the American Heart Association first-aid and cardiopulmonary resuscitation training.

Still, Hayes added, he can't think of a medical reason supporting back blows.

"Not going with the back blows for the adult makes perfect sense to me. You'd have to hit them pretty damn hard," Hayes added. "I'd love to know why they are going back to that."

Blow for blow

For decades, back blows were the standard rescue protocol in the United States for choking emergencies. In Europe, back blows have remained the first intervention. The Red Cross has
always taught that back blows should be tried first with conscious choking children under age 12, though other organizations recommend back blows only for children under age 1.

But in 1976, medical evidence emerged suggesting that the hitting force could drive a stuck object deeper into the windpipe. So doctors started suggesting a new "artificial cough" method, which was developed using abdominal thrusts to lift the diaphragm, forcing enough air into the lungs to create a cough that could move and expel the stuck object. The method was later named the Heimlich maneuver, after the Ohio surgeon who promoted it.

Back blows continued to be taught as the first choking rescue response until 1985, when then-U.S. Surgeon General C. Everett Koop described back blows as "hazardous and even lethal." He declared the "best rescue technique in a choking situation is the Heimlich maneuver." That was when the Red Cross and every major medical and safety organization replaced back blows with abdominal thrusts.

For a generation, the Heimlich was taught as the only lifesaving method until 2005, when the Red Cross underwent its five-year routine international medical review of emergency and first-aid methods.

At that time, experts said scientific evidence suggested different airway obstructions needed different approaches, explained Danielle Webb, spokeswoman for the Lower Bucks Red Cross chapter.

Hard objects, such as hard candy, a grape, a nut or a piece of hotdog, respond better to back blows than abdominal thrusts, said Debra Myatt. She's director of health and safety and youth services for the Red Cross Lower Bucks, which holds 20 to 30 first-aid training classes each month.

Chewed meat, bread, peanut butter or other "mushy" foods that can spread and form a seal in the airway work best with the abdominal thrust, she said.

"We have no way of knowing which method is going to work," Webb added.

Back blows were the first thing Christine Boerner tried when she saw her 8-year-old son choking. It didn't remove the blockage and she had no clue what was caught in his windpipe until she stuck her fingers down his throat and pulled out a chewed-up wad of sausage casing.

"It was horrible," she said.

Better than nothing

While the American Heart Association adopted other changes made by the Red Cross in 2005, including using chest compressions for unconscious adult choking victims, it has refused to change its position on abdominal thrusts as the only intervention for conscious choking victims.

"For many years, no new compelling scientific evidence has emerged to suggest that one technique is superior to another," the heart association said in a statement. "The AHA's science experts didn't feel there was enough new evidence to justify changing our existing recommendation."

The statement also said current international treatment recommendations (on which the Red
Cross and the Heart Association based their recommendations) states that a combination of rescue technique is generally needed.

The disparity between the choking-rescue techniques is likely the result of both organizations' recent attempts to simplify and consolidate resuscitation and first-aid techniques that lay people can follow, said Dr. Gary Zimmer, director of emergency medicine at St. Mary Medical Center in Middletown.

That two major emergency safety training organizations teach different initial responses for choking may be confusing, but ultimately it shouldn't present a danger since one is bound to work, Zimmer said.

No large scientific research studies exist that specifically examine whether back blows or abdominal thrusts work best for unblocking airways, Zimmer added.

"So you are stuck with expert opinion and consensus statements, and you'll never get a bunch of experts to agree on one thing," he said. "Either method is better than doing nothing."