

# CPR Skill Retention: Is Two Years Too Many?



American Red Cross  
Advisory Council on  
First Aid, Aquatics,  
Safety and Preparedness

**A**cross the board, there is no universal standard for CPR certification length. Some training providers, such as the American Red Cross, require annual recertification, while other providers require certification every two years. Although some decision-makers consider two-year recertification programs more economical, is there a point at which someone is no longer prepared to respond effectively in an emergency? How long after testing does skill retention really last?

Many studies have tried to determine how often CPR recertification should occur, based on how well people who are certified in CPR perform at consecutive time intervals after their training. The results of these studies, although not optimistic, are consistent: across the board, from physicians to lay people, CPR skills steadily deteriorate shortly after certification.

In fact, CPR skill retention begins to decline as early as two weeks after a participant is trained,<sup>1</sup> and progressively decreases for about a year. Less than half of participants can pass a skills test one year after training. Skill deterioration seems to plateau between year one and two, but it is inadequate at year one. The American Red Cross reviewed 24 studies, and overall, there is no evidence to support the claim that CPR skills are retained for two years.

In order to combat this lack of retention, experts recommend scheduling refresher courses every six months so that people can continue to practice the CPR techniques they have learned. In fact, the Occupational Safety and Health Administration (OSHA) recently released a new document, "Best Practices Guide: Fundamentals of a Workplace First Aid Program," that encourages employers to lead a skills review and practice session for CPR and AED every six months, and recommends that staff be retrained annually.<sup>2</sup>

Susan Wooley, PhD, CHES, Executive Director of the American School Health Association and a member of the American Red Cross Advisory Council on First Aid, Aquatics, Safety and Preparedness, studied CPR skill retention as part of her dissertation. She found that reinforcement and follow up can strengthen CPR skill retention. One study found that the best predictor of CPR skill performance on a retention test six months after training was the knowledge score.<sup>3</sup>

<sup>1</sup> Moser and Coleman, 1992; Sternbach and Kiskaddon, Fossel and Eliastam, 1984. Literature reviews.

<sup>2</sup> Occupational Safety and Health Administration (OSHA), "Best Practices Guide: Fundamentals of a Workplace First Aid Program," <http://www.osha.gov/Publications/OSHA3317first-aid.pdf>.

<sup>3</sup> Weaver FJ, Ramirez AG, Dorfman SB and Raizner AE (1979). Trainees' retention of cardiopulmonary resuscitation: how quickly they forget. *JAMA*, 241: 901-903.



Several methods, short of a complete course, can boost retention until the next retraining. Examples include reviewing course materials, practicing on a manikin, conducting drills, viewing a short video of CPR skills, and posting CPR guidelines on the door of a bathroom stall. However, Wooley noted that posters are effective only if they are changed periodically in order to continue to attract attention. These simple strategies act as constant “reminders” of skills that are otherwise quickly forgotten.

“CPR skill refreshers not only benefit retention, but also improve performance,” Wooley said. Although ideally CPR refresher courses should be taken every six to nine months, this is not always practical.

“Providing opportunities to think through the skills

learned can help improve skills, but is not a replacement for retraining,” she said.

The Red Cross has already taken steps toward improving CPR skill retention by requiring recertification every year, unlike most other providers. The Red Cross encourages people to get trained in CPR, participate in annual recertification and stay certified for a lifetime. With every class, participants will become more comfortable with the lifesaving skills they learn, retain those skills for a longer period of time and gain the confidence they need to respond in an emergency.

**Contact your local Red Cross chapter to schedule training. To locate the chapter in your community, visit [www.RedCross.org](http://www.RedCross.org) or call (800) 667-2968.**