

Who Should Manage the Airway?

In a recent special issue of *RESPIRATORY CARE*, Daniel Talmor presented a very nice review of airway management during a mass-casualty event.¹ He rightly pointed out that only experienced clinicians should perform intubation in these circumstances, and that training clinicians for the sole purpose of providing intubation during a mass-casualty event is unwise. He also listed anesthesiologists, certified registered nurse anesthetists, intensivists, and emergency medicine physicians as clinicians who the literature shows are able to “successfully manage the airway.” However, the literature also shows that respiratory therapists (RTs) can be trained to perform emergency endotracheal intubation efficiently and safely.

In a small study of 50 consecutive intubations, McLaughlin and Scott² found that the RTs involved successfully intubated all patients. The mean number of attempts was 1.48, and most patients were successfully intubated in less than 1 min. In a larger study, with over 800 intubations, at Duke Medical Center,³ Thalman and colleagues found a 95% intubation success rate among RTs. Ninety-two percent of the intubations were accomplished with fewer than 3 attempts. Moreover, well-trained RTs at Butterworth Hospital in Grand Rapids, Michigan, had a 90% intubation success rate when physicians failed.⁴ At my community hospital, RTs in my department have provided intubation since 1992, with a group success rate always around 90%, and with a very low incidence of complications.

In addition, the American Association for Respiratory Care Clinical Practice Guideline for Management of Airway Emergencies⁵ recognizes registered RTs as clinicians capable of being trained to be primary providers of endotracheal intubation. The key, of course, is training. With good initial training and periodic recertification, including book study, RTs can perform emergency intubation with good proficiency.⁶ Community hospitals are not immune from mass-casualty events and may not be staffed with anesthesiologists and intensivists at all times of the day and night. In that setting, RTs may prove particularly valuable when di-

saster strikes and multitudes of patients require intubation in a short period of time.

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The author responds:

Jeffrey Haynes correctly points out my omission of respiratory therapists (RTs) from the potential pool of providers able to manage the airway in a disaster.¹ This is particularly embarrassing, as *RESPIRATORY CARE* is, of course, the official journal of the American Association for Respiratory Care. There is, as he points out, substantial literature that supports the ability of RTs to safely manage the airway. This practice pattern is prevalent in many parts of the country, and in particular in smaller hospitals and other areas that lack 24-hour physician coverage. Also, the American Association for Respiratory Care encourages and supports this

practice with its Clinical Practice Guideline for Management of Airway Emergencies.²

It should be pointed out that, though widespread, RT airway management is inconsistently practiced. Many RTs, and in particular those who practice in larger, urban centers, do not have the opportunity to practice these skills after their initial training. An emergency mass-casualty event is not the time for these providers to be refreshing their skills. In other words, only those who have intubation as a part of their daily practice should perform intubation in an emergency.

Also, RTs will be a scarce resource in an emergency. Their unique expertise will be required for managing patients in respiratory failure, long after the acute event of intubation. In a scenario where there are other clinicians with intubation expertise available for intubation, I would suggest that RTs' efforts would be better spent on the more complex issues of managing the ventilated patient.

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Noninvasive Ventilation During a Mass-Casualty Event

The January 2008 issue of *RESPIRATORY CARE* published an article by Branson et al,¹ which included a recommendation to forgo noninvasive ventilation (NIV) during an event of mass-casualty respiratory failure (a “surge” event). Moreover, they propose that bi-level positive airway pressure (BiPAP)