

## **EMS Information Bulletin 2012-007**

**DATE:** March 29, 2012

**SUBJECT:** Clarification of Defibrillation Dosages in Statewide BLS and ALS Protocols

TO: EMS Agencies, Regional EMS Councils THRU: Joseph W. Schmider, Director

Bureau of EMS

**FROM:** Douglas F. Kupas, MD

Commonwealth EMS Medical Director

The Bureau of EMS has received several requests for clarification of the adult defibrillation dosages included in the statewide BLS and ALS protocols that became effective on July 1, 2011. The purpose of this EMS Information Bulletin is to clarify these defibrillation dosages.

The current language in the statewide BLS and ALS protocols related to defibrillation is valid and appropriate at this time. Throughout all statewide BLS and ALS protocols, if defibrillation is appropriate for an adult patient, the defibrillation energy dose should be the highest dose that the defibrillator is capable of delivering, up to a maximum of 360 joules.

Because some patients do not respond to the initial defibrillation and because dosages up to 360 joules do not appear to have a significant risk over lower energy doses, the protocols state that providers should "Shock at maximum output of the defibrillator, up to maximum of 360 joules, for initial and subsequent defibrillation attempts."

This DOES NOT imply that a defibrillator that has a maximum energy output of 360 joules is any more effective than an FDA-approved device with a lower maximum energy output.

The Bureau considers all FDA-approved defibrillators or automated external defibrillators (AEDs) with a biphasic waveform to be appropriate for use by EMS agencies. Any FDA-approved monophasic defibrillator used by a Pennsylvania EMS agency must be capable of delivering energy doses of 360 joules.

As indicated in the statewide BLS protocols, AEDs should be programmed to deliver the highest dose of energy possible, up to a maximum of 360 joules, for initial and subsequent shocks. Any EMS agency that is unable to program their AED(s) as required should contact their regional EMS council to report any difficulty in complying with this requirement.