Introduction

• Wake Up Safe (WUS) is a quality improvement initiative of the Society of Pediatric Anesthesia (SPA)

• De-identified registry of adverse events that occur during anesthesia and an analysis of what happened and why

• The aim of this study is to describe and characterize the medication errors reported to WUS

Methods

A retrospective clinical audit was implemented of medication errors leading to adverse safety events reported to the WUS database from 2008-2015.

Results

• The WUS database has accumulated data on 1,708,011 anesthesics since its launch in 2008.

• Medication errors account for 333 of the 2508 safety events (as of 2/1/16)

• Administration of wrong dose and wrong medications represent the majority of these events (62.8%).

• Incidence of a medication related event is less than a cardiac arrest 552 (3.2%) or respiratory 482 (2.8%) event.

• Medication errors are reported more frequently than eye injury 24 (0.1%) or equipment issues 116 (0.7%)

• Cardiac arrest with anesthesia as the primary cause accounted for 115 cases (0.7%), anesthesia as the secondary cause 120 cases (0.7%)

• Anesthesia was identified as the primary cause in 16 serious adverse advents, 1 of those cases resulted in death

• 70.5% of anesthesiologists indicated that the medication error almost certainly could have been prevented

• No harmful events have been reported among the medication errors

Conclusions

• Medication errors are the third highest category of safety events reported to the WUS database following cardiac arrests and respiratory events.

• Despite great advances within the specialty, anesthesia providers continue to make mistakes.

• Specific solutions must be established to reduce the occurrence of these errors.