A complete picture of new year’s eve fireworks injuries treated at Dutch emergency departments

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Background and aim
• Consumers ignite large quantities of fireworks in the Netherlands on New Year’s Eve.
• Around 500 victims with injuries at ED’s on December 31 and January 1 occur each year, since 2013.
• Aim: Gather insights in causes of injuries and types of fireworks that cause specific kinds of injuries.

Methods
• VeiligheidNL and the NOS (largest public news organization) asked all ED’s to report the number of victims due to fireworks at December 31, 2017 and January 1, 2018.
• VeiligheidNL and the Netherlands Society of Emergency Physicians (NSEP) requested all ED’s to collect additional data on:
  – age and gender
  – type of fireworks
  – type of injury and body part injured
  – own use or bystander
  – narrative on what happened
• These additional questions were also asked for victims treated by trauma surgeons, plastic surgeons and victims themselves who had been treated by emergency physicians and eye specialists.

Results
• In 2017-2018 all 87 Dutch ED’s participated. The absolute number of victims with injuries by fireworks was 434.
• This means a strong decline since 2007/2008 (see figure 1).
• 408 unique records with additional information collected among specialists.
• Most injuries were caused by rockets (16%), flash banger/Spanish crackers/nitrates/shells/mortars (all illegal in the Netherlands, 13%), Cakeboxes (11%) and Bangers (11%).

Conclusions
• High response was a consequence of:
  – perceived high importance of the topic.
  – short and simple questionnaire.
  – large network we built with all medical specialists.
• Injuries are mainly caused by behaviour (35%) as well as the product itself (30%) (see table 1).

Political Implications
The ministry will develop policies and interventions that need to provide a further decline in fireworks injuries, based on these results.