Conclusion: SM is an incapacitating chemical warfare agent with several devastating long-term effects on human health. SM-induced respiratory complications tend to progress over the years. While spirometry is a valuable diagnostic tool for evaluation of pulmonary impairment during regular follow-ups, ABG and HRCT are more objective and should be considered for evaluation of the severity and for diagnosis of the respiratory complications.

Keywords: complications; effects; evaluation; follow up; respiratory; sulfur mustard (SM)
Prehosp Disast Med 2005;20(2):s93-s94

A Modification of the JUMPStart Triage Algorithm Used for a Large American City

A. Cooper;[1] G. Foltin;[2] M. Tunik;[2] B. Kaufman;[3] G. Asaeda;[3] D. Gonzalez;[3] J. Clair[3]
1. Columbia University/Harlem Hospital, New York, New York USA
2. New York University/Bellevue Hospital, New York, New York USA
3. Fire Department, City of New York, New York, New York USA

The JUMPStart Triage Algorithm (JTA) for children substitutes bag-valve-mask ventilation (BVM) for airway repositioning as used in the Simple Triage and Rapid Treatment Algorithm (START) paradigm for adults. However, the BVM will not be feasible in a hot zone or even in the triage and staging area (TSA) of a casualty-collection point (CCP), if resuscitation equipment is not readily available.

A modification of the JTA was developed for children <5 years of age that may be necessary operationally under field conditions when a BVM is not readily available. The following principles guided development of this pediatric triage algorithm: (1) it must embrace all hazards; (2) it must be part of the existing triage process for the general population; (3) it must be able to be incorporated easily and quickly into the existing municipal disaster triage process; and (4) the JTA cannot be used as it currently exists, due to the lack of resuscitation equipment in the hot zone, but the START paradigm must remain the foundation for pediatric triage.

Based on these principles, the following approach has been developed for pediatric triage. All pediatric patients must be transferred from the hot zone to a decontamination area prior to definitive triage at a TSA within the CCP. Only dead or moribund patients will remain in the hot zone. Pediatric patients able to walk are tagged as "Green". Pediatric patients unable to walk are initially tagged as "Red" if breathing occurs spontaneously or upon airway repositioning, but are initially tagged as "Black" if breathing is absent. Patients initially tagged as "Red" remain so if their respiratory rate remains <20 or >40 cycles per minute (bpm), but are definitively tagged as "Yellow" if their respiratory rate is >20 and <40 cpm, pulse is palpable, and movement is present and purposeful. Children definitively tagged as "Red" or "Yellow", then, receive expedited off-site transport. However, definitive "Black" tagging and forensic transport cannot occur until a child initially tagged as "Black" has failed to respond to two rescue breaths via BVM administered as soon as possible after transfer to the TSA.

Conclusion: It is speculated that this paradigm will be effective in saving children's lives under field conditions in mass-casualty events.

Keywords: children; JUMPStart Triage Algorithm; mass-casualty event; triage
Prehosp Disast Med 2005;20(2):s94

Mass Toxicological Incidents (MTIs)—Are Local Procedures Necessary?

P. Gula;[1] J. Nitecki;[1] W. Hladki;[2] L. Brongel;[2] B. Kozanecka-Muzyk[3]
1. State Fire, Krakow, Poland
2. Emergency Medicine and Multiple Trauma Department, Medical College Jagiellonian University, Poland
3. Rydygiera Hospital, Krakow, Poland

With a population of >1 million, Krakow is a major town in Poland. The Krakow area has a high risk for chemical events related to the chemical industry and hazardous material transport. During the last two years, there were three major chemical incidents, of which the largest involved 37 patients. Based on international experience, local emergency procedures were developed. These are based on the cooperation of numerous institutions, including State Fire and Rescue Service, Rescue Coordination Center, Regional Toxicological Information Center, Krakow's emergency medical services, and hospital emergency departments.

Procedures include detection, on-site rescue procedures including decontamination if needed, transportation, and hospital treatment. The important part of the system is cautious training, including drills and the evaluations of this training. The authors will present algorithms for mass-toxicological incidents and the way they adapted to local response system, and their follow-up after implementing the plan in drills and chemical incidents.

Keywords: chemical; emergency; planning; Poland; preparedness; procedures
Prehosp Disast Med 2005;20(2):s94

Assessment of Psychosocial Impacts of a Chemical Weapons Attack on Civilian Population of Sardasht, Iran

S. Khateri;[1] M. Soroush[2]
1. Janbazan Medical and Engineering Research Center (JMERC), Janbazan (Veterans) Organization, Director, Chemical Warfare (CW) Victims Research Unit, Iran
2. Janbazan Medical and Engineering Research Center (JMERC), Iran

Introduction: Individuals sustaining wartime injuries that survive the experience nevertheless may develop serious long-term health problems as a result. Previous studies of this phenomenon, which focused primarily on the effects of trauma due to conventional armament, have documented various clinically defined categories of chronic disorders in battle-injured personnel. However, a similar body of medical literature has not been developed as extensively for persons affected by nuclear, biological or chemical (NBC) weapons. In particular, there have been few in-depth analyses of long-term psychosocial effects among civilian victims of NBC attacks. However, the increasing probability of