IPRED IV TOXICOLOGY DRILL - SOROKA UNIVERSITY MEDICAL CENTER

On January 13th, 2016 the IPRED IV Conference final event takes place in the Beer Sheva area with the presentation of a large scale regional toxicological drill. The drill will involve first emergency response of local and regional Emergency Systems at the simulated event site; then a large Mass Casualty Event (MCE) management at the Soroka Medical Center – affiliated to BGU.

In the site of the event various emergency scenarios will be demonstrated, including accidents and terror attacks; the treatment is similar in all of them. Among the first responders that will take part in the exercise are the police, MDA (EMS) and fire fighters. In the second lag, military and municipal teams will join forces to reinforce and support the treatment and decontamination efforts.

In routine emergency events, the commander of the scene is the senior police officer. The main efforts will include: Containment of the contaminated area, Identification of the hazardous material, Treatment and evacuation of the casualties, Decontamination of the event site, Risk communication and guidance of the public, Decontamination of the first responders

Observe and participate in a large scale regional Mass Toxicological Exercise.
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Introduction:
The likelihood of a civilian toxicological MCE happening in the Beer Sheva vicinity is high, due to the presence of numerous chemical industries in the town surroundings. A toxicological MCE after a terrorist attack is also possible, with a lesser probability. SOROKA happens to deal on a yearly basis with real limited toxicological casualty events. The SOROKA capability to contain a toxicological MCE is high, unto over 250 victims, thanks to the hospital size, number of beds (1055) and efficient personnel.

The Soroka Toxicological MCE Drill
The drill organization
* Israel Ministry of Health Emergency Division
* Israel defense Force
  - Home Front Command
  - Medical Corps NBC Branch

The Soroka Response to Toxicological MCE
* Emergency & Contingency Team
* Medical management team
* One Toxicology specialist
* The Emergency Response staff to MCE - around 250 trained personnel

Expected Count of Casualties
* Overall 100 - including 10% pediatric victims

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<tr>
<th>Severe</th>
<th>Moderate</th>
<th>Light &amp; stress</th>
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<td>20</td>
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The Soroka Modus Operandi in a Toxicological MCE

Cross confirmation of the first notice of a big event happening in Beer Sheva area

Medical emergency responders recruitment
* In-house staff immediate recruitment
* Call to the ED of emergency responders support

Emergency Department reorganization to handle the Toxicological MCE
* Decontamination area designation
* "Yellow line" demarcation between contaminated and clean areas
* Protection gear for medical, security and orderly emergency responders working in the decontamination area

Management of the Toxicological MCE in the ED arrival (schema)
* Triage in contaminated area
  - Immediate – goes to resuscitation before decontamination
  - Walking – light and/or stress injuries
  - Unable to walk - severe injuries
* Decontamination for both walking and decumbent patients
* Passing the "yellow line" from contaminated to clean areas of the ED
* Medical Triage in clean area
  - Trauma site – severe and combined chemical and trauma injury
  - Immediate site – moderate casualties
  - Light injuries site – Light casualties and stress reaction

Types of expected casualties
* Light
  - Toxicological
  - Stress reaction
* Moderate
  - Traumatic
  - Toxicological
  - Combination of both
* Severe life-threatening
  - Traumatic
  - Toxicological
  - Combination of both

Toxicological Agent Identification
* Coordination between the MoH, Home-Front command, special investigation teams and the SOROKA Chief Toxicologist
* Clinical assessment at SOROKA
* Forensic and special teams investigation at the event site

Treatment at SOROKA MCE Sites
* Trauma Crash Unit Site
  - Resuscitation
  - Medical treatment of toxicological effects
  - Control of combined traumatic & toxicological injuries
  - Transfer to immediate surgery o GICU
  - Psychological assessment
* Intermediate Site
  - Medical treatment of toxicological effects
  - Control of combined traumatic & toxicological injuries
  - Transfer to delayed surgery or hospitalization
  - Psychological assessment
* Light & Stress Site
  - Examination and observation
  - Transfer to immediate surgery
  - Psychological assessment
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ALGORITHM OF TOXICOLOGICAL MCE MANAGEMENT at the SUMC

Casualty unloading from Ambulance

Triage

Decontamination Process

MEDICAL TRIAGE

Light & Stress Injuries Site

Moderate Injuries Site

Severe & Combined Injuries Site

Resuscitation without decontamination

Walking pts.

Severe lying pts.
Soroka University Medical Center –
The Medical Iron Dome of the South

Soroka University Medical Center of Clalit Health Services is the only hospital in the Negev and among the largest in Israel, with more than 1,000 beds. The Medical Center serves as a “mega-hospital” for a population of over one million people who reside in an area that comprises some 60% of the State of Israel. As the sole tertiary hospital in the area, Soroka is a strategic asset for the State of Israel. Soroka is one of Clalit’s centers of power and a significant component of Israel’s health system.

Soroka is a leading hospital that provides advanced medical care of exceptional quality, putting patients and their needs at the center, and is also a model for education and medical research.

The School for Health Professions and the Joyce and Irving Goldman medical school of Ben-Gurion University of the Negev are located on the medical center’s campus.

Soroka Medical Center is the largest employer in the Negev and employs approximately 4,200 employees in a variety of different sectors.

Soroka Medical Center is a leader in a large number of fields, advanced services and research:
• The Cardiology Center: cardiothoracic surgery (surgery and cardiology)
• Bariatric Treatment: surgery for the treatment of morbid obesity
• The National Pediatric Infectious Disease Unit, a leader in research in Israel and abroad
• The Unit for Infection Prevention Control
• The Genetic Institute is a leader a range of activities and research
• Colorectal Surgery
• The Brain Imaging Research Center – brain imaging
• Intensive Care Units (general, internal medicine, and pediatric) with first-class clinical results
• Trauma Unit - The hospital operates the largest trauma unit in the country, with eight treatment stations, including a special station for treating children. Over 2,500 trauma cases are treated at Soroka each year by experienced trauma teams.

The delivery room at the Saban Maternity Center is the “most fertile” in Israel and consequently its medical staff is the most experienced. Personal attention is given to each and every mother. About 16,000 births take place each a year at Soroka.

Soroka Medical Center has been awarded the prestigious accreditation of The Joint Commission of Accreditation of Health Care Organizations (JCAHO/JCI). This certification is an international criterion for meeting the objectives of quality and safety in the field of health care that is awarded to health organizations.