



Casualty Planning Analysis Tool

What is a Casualty Planning Analysis Tool?

Emergency and medical planning tool used to estimate the number and type of casualties, EMS transport time, workload requirements, and supplies necessary to treat the casualties resulting from a variety of scenarios.

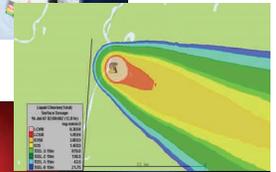
What Does the Casualty Planning Analysis Tool Do for Planners?



- Planners select population at risk, severity percentile, and relevant threats.
- Local threats such as natural disasters and toxic industrial material releases are modeled and analyzed to estimate the number and type of casualties per incident.
- National planning scenarios are modeled across the spectrum of severity levels based on historical incidents and relevant models to determine corresponding casualties.
- Local assets such as ambulances, patient transport time, bed capacity and other relevant parameters can be entered to determine specific capacities and capabilities.
- Output can assist planners prioritize supply, equipment, staffing, and transport requirements based on 10-15 relevant scenarios.

ASG's In-Depth Casualty Analysis

- Applies monte carlo analyses for each scenario.
- Aggregates historically relevant incidents to predict severity of likely, similar incidents.
- Determines unique casualty profile for each scenario and the associated casualty numbers.
- Incorporates historical profile of toxic industrial material releases.
- Dynamically applies national planning scenarios and local threat scenarios to enable planners to select and adjust severity percentile.
- Produces a unique equipment and supply cache specific to the threat scenarios and cumulative casualty profile.



Enter Population at Risk

Number and type of casualties estimated based on percentile of probabilistic scenarios

Airfield Incident

Aircraft (single or multiple) mishap on airfield during normal airfield operations or special event such as an Open House or Air Show event.

Population at Risk: 10,000

SEVERITY/PROBABILITY: HIGH, MEDIUM, LOW

Based on a population of 10000, you may expect between 31 and 539 patients total

| Estimated Casualties | MEDIUM SEVERITY |
|----------------------|-----------------|
| Immediate 15% | 20 |
| Delayed 25% | 34 |
| Minimal 40% | 54 |
| Dead/Dying 20% | 27 |

Allowance standard assumptions (Priority Guidance for IRRCC Employment/Sustainment):
Field response team has the capability to respond to 300 casualties/24 hours.
This incident has an estimated 136 casualties/24 hours.

Immediate: The casualty requires immediate medical attention and will not survive if not seen soon. Any compromise to the casualty's respiration, hemorrhage control, or shock control could be fatal.

| | |
|---|-----|
| 15% have advanced airway problems | 3.1 |
| 10% have some airway involvement | 3.1 |
| 30% have blunt trauma | 6.1 |
| 5% have burns (2nd degree or more-20% of body) | 1.0 |
| 10% have multiple trauma (Fr, Burn, Blunt trauma) | 2.0 |
| 25% have fractures | 5.1 |

Delayed: The casualty requires medical attention within 6 hours. Injuries are potentially life-threatening, but can wait until the immediate casualties are stabilized and evacuated.

| | |
|---|------|
| 15% have some airway involvement | 5.1 |
| 40% have blunt trauma | 13.5 |
| 10% have burns (2nd degree or more-20% of body) | 3.4 |
| 10% have multiple trauma (Fr, Burn, Blunt trauma) | 3.4 |
| 25% have fractures/lacerations | 8.5 |

Minimal: "Walking wounded," the casualty requires medical attention when all higher priority patients have been evacuated, and may not require stabilization or monitoring.

| | |
|--|------|
| 40% have abrasions/lacerations | 21.8 |
| 25% have Fractures/Sprains | 13.6 |
| 5% have burns (2nd degree or more-20% of body) | 2.7 |
| 20% have psychological or medically unexplained problems | 10.9 |
| 5% have minor ocular injuries | 2.7 |
| 5% will have delayed medical symptoms | 2.7 |

Benefits of ASG Analysis

- Engineered and tailored to local specifications
- Incorporates hundreds of data sets
- Operationally relevant
- Employs consensus standards and models
- Powerful modeling and statistical calculations
- Experienced and qualified analysts
- Comprehensive scope—all-hazards
- Full-picture analysis of staffing, supplies, transport, external factors, and threats
- Objective, professional, and defensible



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