

TACTICAL / EPIDEMIOLOGICAL REVIEW

Bombing Events & Blast Injuries

Public Health Analysis and
Pre-Hospital Care Management

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Taxonomy of Terror: Defining the Threat

Focus: State/Structural Impact vs. Individual/Civilian Impact

Domain: Legal/Political vs. Academic/Medical

EU Framework - 2002

Legal/Structural: Focuses on systemic disruption.

Seriously **destabilizing or destroying** the fundamental political, constitutional, economic or social structures of a country or an international organization.

US Federal Criminal Code Title 18

Legal/Civilian: Focuses on coercion.

(A) involve acts dangerous to human life...
(B) appear to be intended: to **intimidate or coerce** a civilian population, or to influence the policy of a government by intimidation or coercion...

Oxford English Dictionary

Academic/Psychological: Focuses on fear.

A policy intended to **strike with terror**... the employment of methods of intimidation; the fact of terrorising.

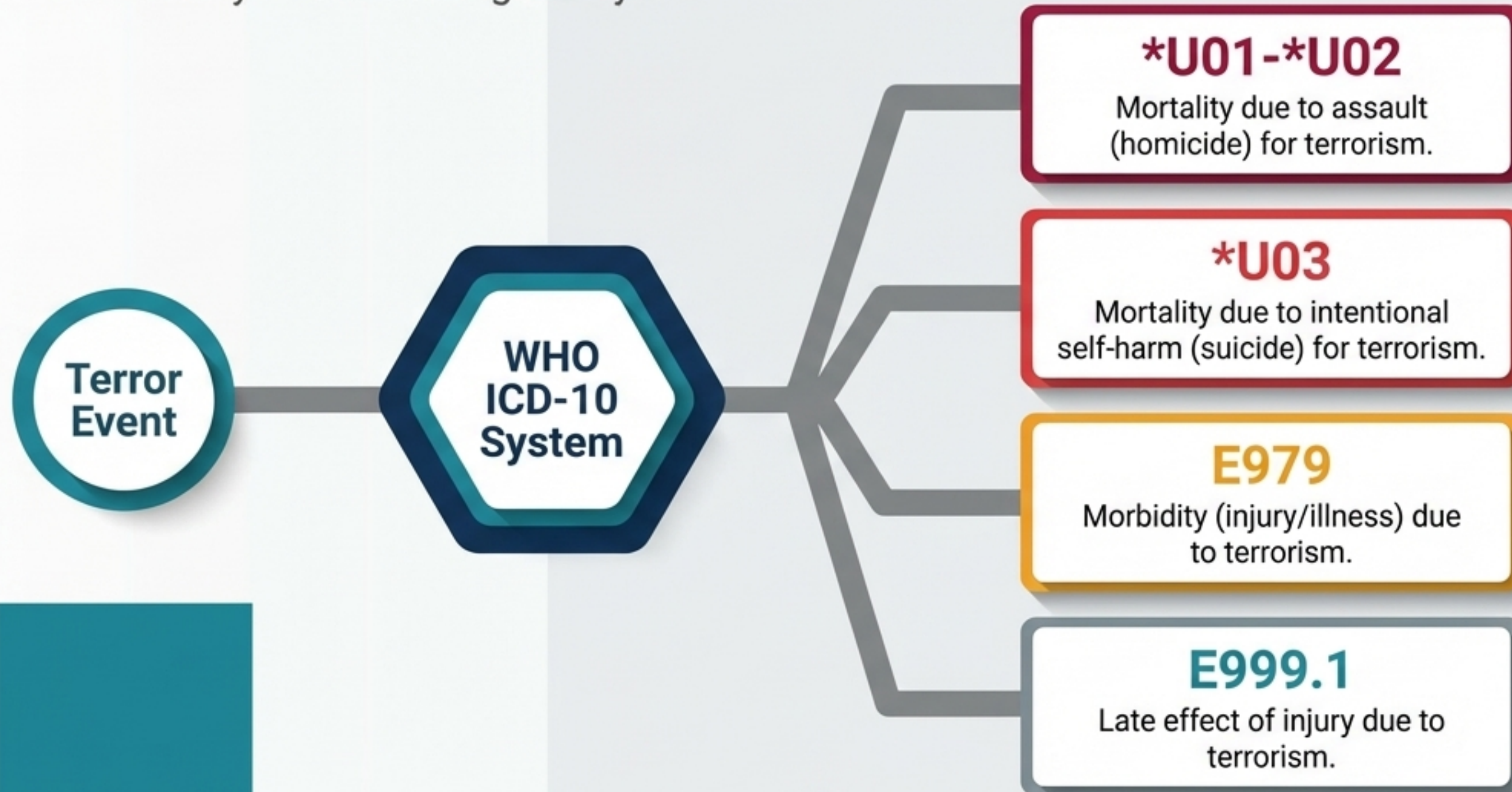
Medical & Public Health Definition - 2003

Clinical/Epidemiological: Focuses on health outcomes.

The intentional use of violence... against non-combatants and/or those services essential for or protective of their health, resulting in **adverse health effects**... ranging from a loss of well-being to injury, illness, or death.

The Medical Infrastructure of Terror

The CDC's National Center for Health Statistics utilizes specific WHO International Classification of Diseases (ICD-10) codes to track the morbidity and mortality of terrorism globally.



Global Flashpoints: The Escalation Phase



Europe, 1970s-1980s: UK IRA Bombings

An era of sustained, localized urban explosive campaigns.



Africa, 1998: Kenya & Tanzania Embassy Bombings

A shift toward massive, simultaneous, high-casualty structural attacks against international targets.



Diagnostic Comparison: Coordinated Transit Attacks

Madrid: March 11, 2004

Timeline: 7:37 am - 7:40 am (3 minutes).

Target Matrix: 10 bombs exploded across 4 commuter trains (3 undetonated bombs found later).

Chemical Signature: Dynamite (construction-grade).

System Load: 291 ambulances mobilized; 112 Call Center overwhelmed with >20,000 calls.

Impact: >1,800 Injuries; 191 Deaths.

London: July 7, 2005

Timeline: 8:50 am (Subway) & 9:47 am (Bus).

Target Matrix: 3 near-simultaneous detonations via cell phone alarms underground; 1 double-decker bus.

Chemical Signature: HMTD (Hexamethylene Triperoxide Diamine).

System Load: 100 ambulances dispatched; >250 EMS professionals.

Impact: >700 Injuries; 56 Deaths (52 civilians, 4 terrorists).

The Evolution of the Threat Vector

Sophistication & Planning

Observation:

Moving away from crude, isolated devices.

Shift:

Extensive reconnaissance, multi-stage execution, and use of secondary timing mechanisms (e.g., cell phone alarms in London).

Coordination

Observation:

Moving away from lone actors.

Shift:

Synchronized, multi-nodal strikes designed to overwhelm municipal emergency response capabilities simultaneously (e.g., 10 bombs in Madrid).

Materials & Targets

Observation:

Moving away from hardened government/military targets.

Shift:

Exploitation of soft civilian infrastructure (commuter transit) using non-standard or dual-use chemical signatures (Dynamite to HMTD).

Pre-Hospital & EMS Operational Friction



TRIGGER: Underground/Transit Detonations

Complete failure of mobile phones and radio communications

IMPACT:

Blind deployment and severed command/control



TRIGGER: Immediate aftermath chaos

Walking wounded (minor/no injuries) self-evacuate first

IMPACT:

Creates a physical bottleneck that delays access to and evacuation of the critically injured



TRIGGER: Evolving attack methodologies

High risk of structural collapse and delayed secondary devices

IMPACT:

Forces staging delays; limits immediate medical intervention



TRIGGER: Massive psychological and resource drain

Inability to return to normal operations the following day

IMPACT:

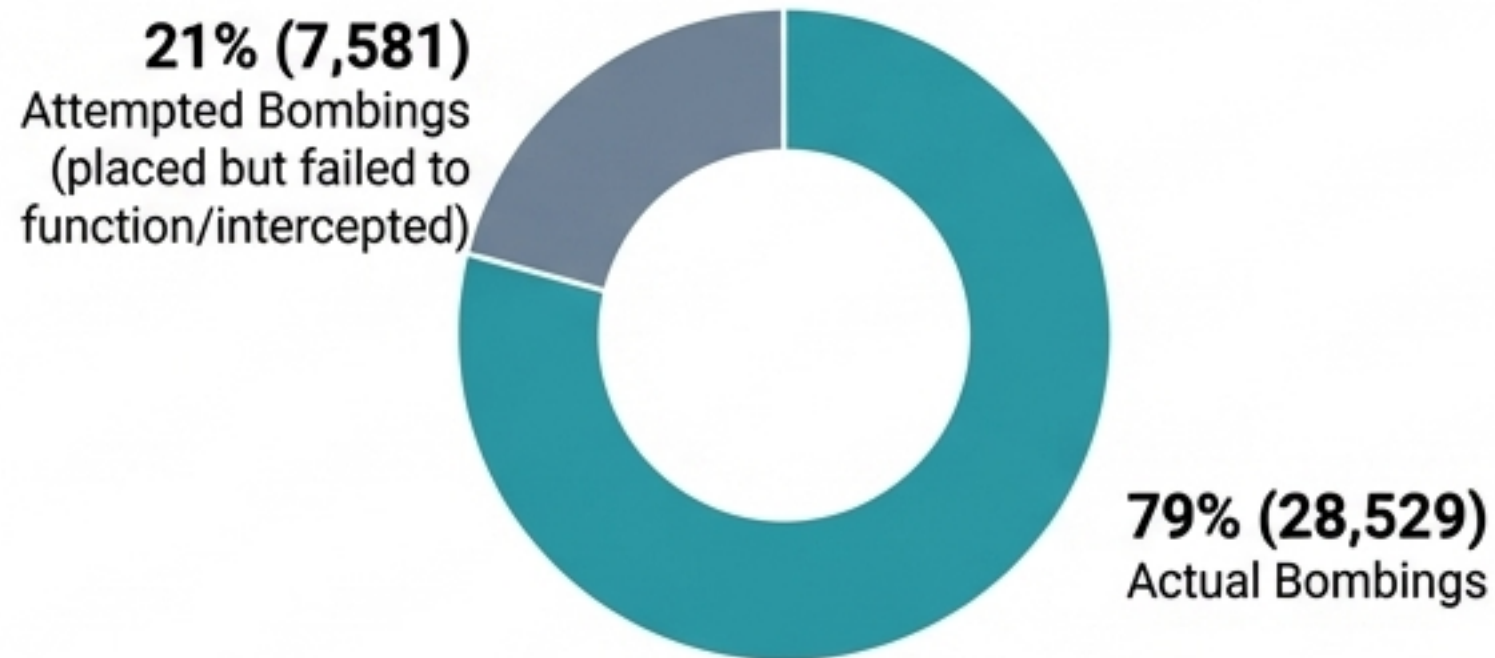
Sustained degradation of baseline city emergency services

US Incident Dashboard: The Domestic Landscape (1983-2002)

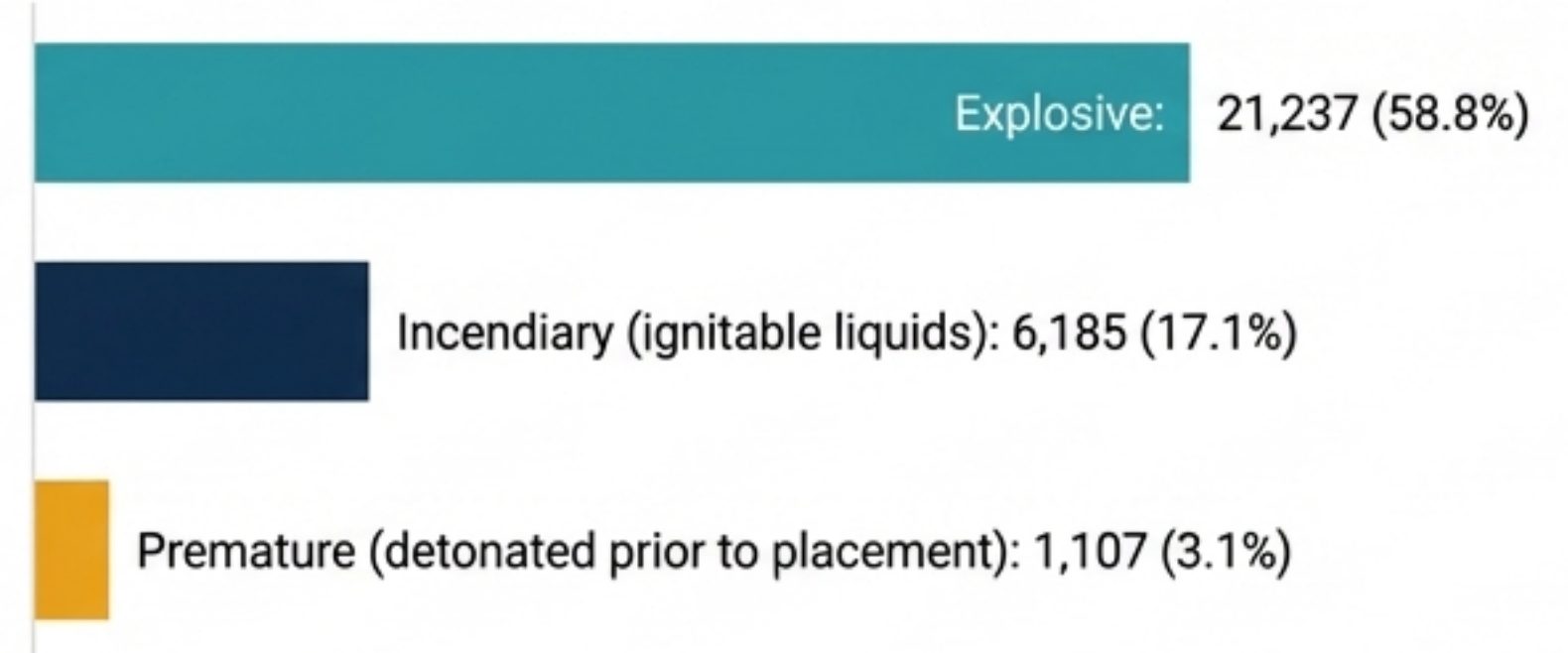
36,110 Total Incidents

tracked over two decades.

Actual vs. Attempted



Methodology of Actual Bombings

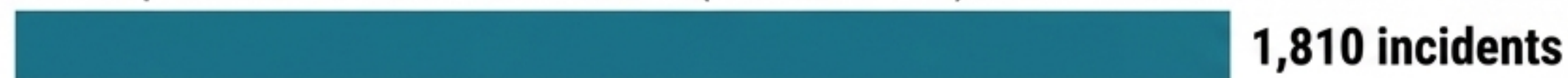


Key Insight: Between 1996 and 2002 alone, the system also tracked 925 major international terrorist events, showing a sustained parallel threat alongside domestic incidents.

US Incident Dashboard: Anatomy of Motive

Analysis of determined motives behind domestic explosive/incendiary events.

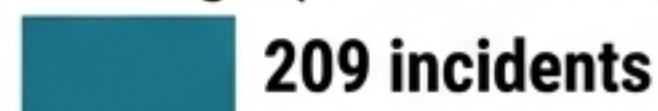
Attempted Homicide / Homicide (Intent to kill)



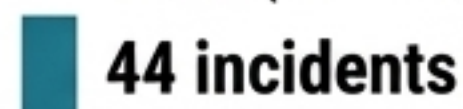
Vandalism (Intent to cause property damage)



Revenge (Intent to respond to prior action)



Suicide (Intent to kill oneself)



Protest (Intent to gain publicity)



The Extortion Anomaly

While rare in actual bombings (29 incidents), Extortion makes up 19.5% (113 incidents) of all attempted bombings. This indicates it is primarily used as a psychological leverage tool rather than a kinetic weapon.

US Incident Dashboard: Target Analysis

Spatial distribution of actual domestic bombing placements (1983-2002).



Residential

10,465 incidents (29.0%)

Insight: The most frequent target profile, aligning with the high prevalence of homicide/domestic violence motives.



Mailbox

7,404 incidents (20.5%)

Insight: Represents a highly accessible, low-risk placement vector for both commercial and residential disruption.



Vehicle

5,663 incidents (15.7%)



Commercial

5,151 incidents (14.3%)

Includes banks, bars, hotels, and manufacturing plants.

Materials Profile:* Construction-grade Dynamite and Nitrate-based fertilizers (1,586 incidents) remain the dominant, highly-accessible chemical signatures across all target profiles.

Synthesis: Counter-Terrorism as Public Health

