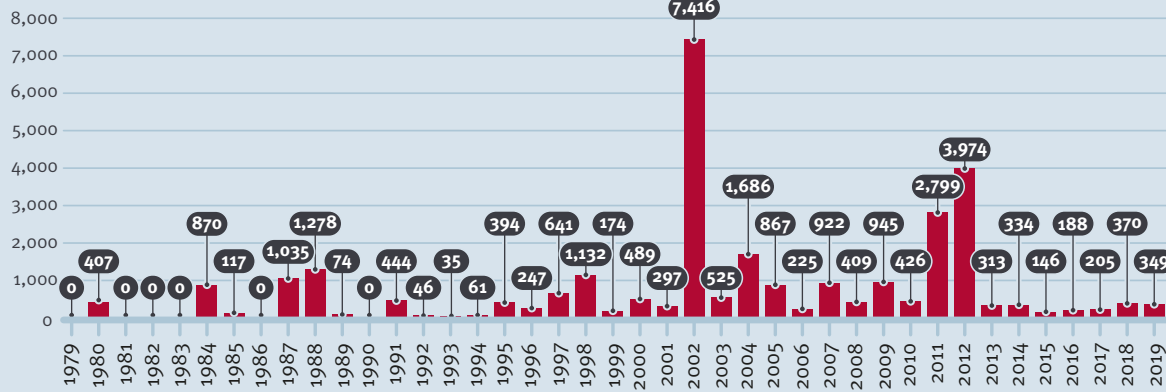


Quick facts on unplanned explosions at munitions sites (UEMS)*

The human cost of UEMS

Casualties of UEMS, 1979–2019

During the period of January 1979 to August 2019, almost 30,000 casualties resulting from UEMS incidents have been recorded. The highest number of casualties was recorded in 2002, mainly due to the devastating incident that occurred in Lagos, Nigeria. Similarly, the incident in Abadan, Turkmenistan, in 2011 and the one in Brazzaville, Congo, in 2012 contributed strongly to the spikes in 2011 and 2012.



AN **AVERAGE**
OF
MORE THAN 746
CASUALTIES
(DEATHS AND INJURIES)
PER YEAR
HAVE BEEN
RECORDED
1979–2019

Number of UEMS incidents from January 1979 to August 2019
606

Average yearly incidents per decade			
1980s	4	2000s	23
1990s	11	2010s	22.6

Total casualties of all UEMS incidents from January 1979 to August 2019
29,840

Number of casualties per decade			
1980s	3,781	2000s	13,781
1990s	3,174	2010s	9,104

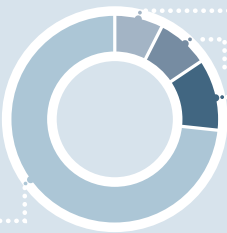
UEMS incidents by casualties**

UEMS incidents with largest numbers of casualties.



- 1st 27/01/2002 Lagos, Nigeria 6,500
- 2nd 04/03/2012 Brazzaville, Congo 3,777
- 3rd 07/07/2011 Abadan, Turkmenistan 1,428
- 4th 10/04/1988 Rawalpindi, Pakistan 1,193
- 5th 04/06/1998 Arzamas, NIZ, Russian Federation 1,091
- 6th 21/12/1987 Alexandria, Egypt 1,006
- 7th 02/2004 Seonggang, North Korea 1,000
- 8th 29/04/2009 Dar es Salaam, Tanzania 726
- 9th 22/03/2007 Malhazine, Mozambique 622
- 10th 20/11/2002 Riobamba, Ecuador 548

73.3% of UEMS during the period 1979–2019 occurred in state facilities



7.5% of UEMS during the period 1979–2019 occurred in stockpiles held by commercial companies

8.1% of UEMS during the period 1979–2019 occurred in stockpiles held by unknown actors

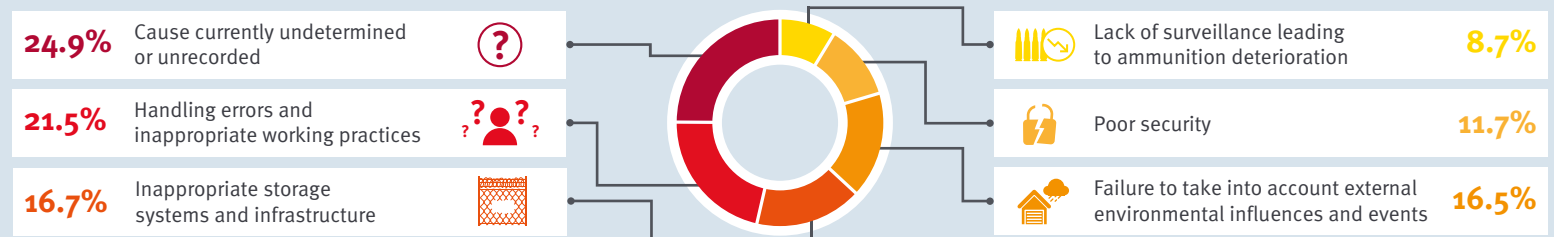
11.1% of UEMS during the period 1979–2019 occurred in stockpiles held by armed groups

18.6% of UEMS during the period 1979–2019 occurred in non-state facilities

** Sex-disaggregated numbers are not available for most of the incidents, although it is clear that women, men, boys, and girls were equally among the victims in most cases given the fact that all of the incidents happened in heavily populated residential areas.

UEMS: Main causes

Improper physical security and stockpile management (PSSM) practices increase the probability of UEMS occurring. During the period examined (1979–2019), the main causes behind UEMS incidents were:



UEMS: Consequences

A single UEMS incident can lead to a number of consequences, including:

- Human** Human costs: deaths and injuries
- Material** Material costs: damage to private and public property and infrastructure
- Environmental** Environmental impacts: environmental contamination by unexploded ordnances (UXO) and dangerous chemicals
- Socio-economic** Socio-economic costs: displacement, loss of livelihoods, and decrease in gross domestic product (GDP)
- Political** Political impacts: loss of government and military staff due to loss of life, criminal prosecutions, or other career impacts
- Military** Military impacts: decrease in operational readiness due to loss of materiel and personnel

Average annual casualties per decade

