

Monthly Threat in Focus January – Crowd Management





Monthly Themes for 2022



Advisory Services Monthly Threat In Focus: Crowd Management - Being Prepared

Crowd Management for large scale events has hit the headlines recently after the tragic crowd surge at the Travis Scott Astroworld gig in Houston, Texas, killing ten people in November last year. ¹ This article will look at the issues concerning crowd surges, the cause of a crowd surge, what to do as an organiser of the event and what you can do as an individual to protect yourself in such a situation.

Crowd Surges: A crowd surge is when a large group of individuals move together into a space.

Crowd Collapse: "Shock waves", caused by a surge can move through a crowd, causing people to fall over and struggle to get back up.

These are major contributing factors that can turn a surge deadly. 2.

Many experts including John Fruin, author of the paper <u>'The Causes and Prevention of Crowd Disasters</u>' describes suffocation rather than crushing injuries as the main cause of death in casualties after a crowd surge. He states,

"Intense crowd pressures, exacerbated by anxiety, make it difficult to breathe...Some people die standing up; others die in the pileup that follows a 'crowd collapse.'" ³.

The ten fatalities from the recent Astroworld crush in Texas were the result of 'compression asphyxia'. 4.

Advisory Services Monthly Threat In Focus: Videos of Crowd Surges



You Tube 2018



You Tube 2018

Crowd Surge at Oasis Concert, Wembley, 2018

At the Oasis gig, the crowd surge is so strong it pushes the front stage facing security barrier forward at least four foot as security officers are forced to move back.

Crowd surge at Stereophonics Concert, Wales, 2018

Advisory Services Monthly Threat In Focus: Crowd Management - Causes



Crowd surges can be triggered for several reasons including but not limited to:

- 1. An artist arriving on stage, and an excited crowd moving forward in one mass movement. **5 ASTROWORLD GIG, TEXAS, 2021** You Tube 2021
- **2.** Inclement weather, triggering individuals to find shelter causing one mass movement towards a sheltering venue. E.g. Belarus railway station crush in 1999 where 54 died escaping a storm. ⁶
- **3.** A medical emergency



- **4.** Gate storming/people attempting to get into a sold-out concert or popular event E.g., the Walmart Thanksgiving sale crush in 2008 where one person died. ⁷ WEMBLEY GATE STORMING, JULY 2021 You Tube 2021
- 5. Panicked crowd
 - a. If someone shouts 'he's got a gun'
 - b. Suspected terrorist incident. 8.



- 6. Poor event organisation:
 - a. Restricted view causing some to over crowd other areas for a better view.
 - b. Poor signage, flow of movement. E.g. Monaco station crowd surge where people were trampled on and were crushed against barriers. **MONACO STATION CROWD SURGE 2018** You Tube 2018

Advisory Services Monthly Threat In Focus: Crowd Management Recommendations

CROWD MANAGEMENT SUGGESTIONS

- A bespoke crowd management plan for each event utilising modelling tools and taking into consideration potential crowd reactions and responses.^{9.}
- Strong effective liaison with emergency services, designated RVPs and appropriate equipment strategically in place.
- Crowd control measures ensuring exits and entrances are safe places that are clearly signed and accessible.
- Stewards, security and first aid staff clearly visible. 10.
- Effective Crowd monitoring. 11. Observation platforms to monitor the crowd for a surge, shockwave or crowd collapse.
- 'Showstop' procedure this would be the last line of defence for any life-threatening incident relating to the crowds. 12.
- Post event debrief in consultation with Police and local authority to address and identify improvements for future events.

Advisory Services Monthly Threat In Focus: Crowd Management – Protecting yourself

HOW TO PROTECT YOURSELF DURING A SURGE

Avoid the densest part of the crowd and barriers. ¹³ Seek an exit from the immediate area of crowding. Remain upright. ¹⁴ Cross arms over chest to protect rib cage. ¹⁵

Refrain from screaming to preserve oxygen in your immediate space. 16.







Advisory Services Monthly Threat In Focus: Crowd Management Lessons Learnt

- The study of crowd flow management and crowd dynamics were introduced after both the <u>Hillsborough disaster</u> in 1989 and the <u>Manchester airport Boeing fire</u> in 1985 and crowd modelling tools are now commonplace for the managing of large groups of people. ¹⁷.
- Good communication and a clear stop show procedure is paramount. It was reported Travis Scott continued to perform for 40 minutes after a major incident was declared at Astroworld and has stated he was not told to stop his performance. However, only the festival director and executive producers had the authority to stop the show and weren't part of Scott's team. ^{18, 19, 20.}
- **Review and revise existing procedures** following lessons learnt from previous events. Whilst Scott's 56-page event operations plan included everything from a terrorist incident to severe weather it did not include crowd surges despite previous similar incidents. ^{21, 22}.









