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The Language of Crowds

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The chief virtue that language can have is clearness, and nothing detracts from it so much as the use of unfamiliar words.

-Hippocrates

GCMA I WORDS MATTER 1/8

Introduction

When describing crowds and crowd-related accidents/incidents, the vocabulary is often inconsistent and sometimes misleading. On many occasions, incorrect words are used to define crowd density, crowd risks and, hence, crowd safety. Some forms of words even prematurely assume the cause of death in the minutes following an incident.

Examples include:

- **a. General Descriptive Terms** Broad descriptors of crowd conditions: Overcrowded, Full, Overflowing, Rammed, Packed to the gunwales, Wall-to-wall.
- **b. Misleading Comparisons & Colloquialisms** Metaphors or informal terms that misrepresent crowd risk: *Like Piccadilly Circus, School of fish, Mobbed, Overpopulated.*
- **c. Emotionally Charged & Misused Terms** Often misapplied in reporting, distorting incident realities: *Crushed, Stampede, Panic, Trampled.*

NB: these terms may be correct in certain, limited circumstances, however when used inaccurately the consequences can be significant.

Specifically, words like "crushed", "stampede", "trample[d]" and "panic" are often used in the media to define how (and why) a crowd incident occurs. This can influence legal proceedings and distort public perception, which can mislead enquiries into the root causes of, and hence, future prevention of crowd-related accidents and incidents. They can also misinform the public and potentially generate inappropriate or dangerous responses to future incidents.

Recent research has shown that the way in which media reports on crowd incidents "can influence public understanding and emotional response, shaping societal perceptions and potentially impacting safety measures and preparedness strategies":

(How crowd accidents are reported in the news media)

Global Crowd Management Alliance® (GCMA) has created the present resource to assist journalists, legal professionals, public officials and other stakeholders to accurately communicate crowd safety information to the public, alongside industry professionals

By promoting accurate terminology, we hope to improve understanding, support effective crowd management, and enhance public safety.

This is a 'living document' and GCMA welcomes feedback and critique, to ensure it remains a relevant and useful resource. Such correspondence should be directed to hello@thegcma.com

Global Crowd Management Alliance® (GCMA) is a worldwide network of individuals and organizations committed to representing and advancing the crowd management and security services industry within the public and private sector. The mission of GCMA is to Educate. Advocate. Motivate. Learn more and apply for membership at www.thegcma.com

GCMA I WORDS MATTER 2/8

Key Definitions

Capacity

/kəˈpasɪti/

The maximum number of people a venue can safely accommodate. Capacity includes four factors: Safe occupancy, ingress, egress and evacuation capability.

Significance: Ensures that crowd numbers remain within safe limits, preventing overcrowding and facilitating efficient evacuation if necessary.

Compressive Asphyxia

/kəm'pres.iv/əs'fik.si.ə/

A type of mechanical asphyxia caused by chest compression. Refers to a situation where the physical pressure of a tightly packed crowd prevents individuals from breathing due to restricted chest expansion and the inability to take in air. In highly dense crowds, asphyxia can begin to develop in a matter of minutes.

Not to be confused with: Blunt trauma (from trampling)

Significance: In fatal crowd disasters, compressive asphyxia is the primary cause of death.

Crowd Collapse

/kraʊd/kəˈlaps/

A situation where a crowd, either static or moving, falls to the ground or floor.

Not to be confused with: Crowd Crush, Progressive Crowd Collapse, Crowd Surge, Stampede **Significance**: Can lead to serious injuries and/ or death if not managed effectively.

Crowd Control

/kraʊd/kənˈtrəʊl/

Measures taken in response to a crowd that has become disorderly, unlawful or violent, typically to restore order and ensure safety. This is often defined as a police function if Crowd Management plans fail.

Not to be confused with: Crowd Management, Crowd Safety, Crisis Management, Event Control. (Crowd Control is something that happens *to* the crowd, whereas Crowd Management is something that happens *with* the crowd, ideally.) **Significance**: Essential in responding to crowd-related emergencies or dangerous crowd dynamics.

Crowd Crush (aka Crush)

/kraʊd/krʌʃ/

A situation where people fill a space beyond safe limits, making it difficult for individuals to breathe or move freely, leading to a disaster in which excessive crowd density, (people occupying the same physical space at the same time) creates enormous pressure on bodies. Once critical density is exceeded (no space remains between individuals), people lose control of their movements, leading to shoving, pushing and mass instability. Victims can suffer asphyxia or blunt trauma, with fatalities documented under extreme pressure. Crowd crushes typically stem from organisational failures, (allowing numbers to exceed safe limits, poor infrastructure or ineffective communication) rather than any individual loss of self-control.

Not to be confused with: Stampede, Crowd Collapse, Crowd Surge.

Significance: Crowd crushes are preventable but can cause suffocation, injury, or even death if not controlled in time. Mislabeling them as "stampedes" or blaming "mass panic" diverts attention from real causes: overcrowding, design or management failures and undermines efforts to ensure safe occupancy and effective crowd-safety measures. Crowds packed with more than 5 people per square metre are at high risk. Studies have documented fatalities within 10-15 minutes under extreme pressure.

Crowd Density (aka Density)

/kraʊd/ˈdɛnsɪti/

The number of individuals in a given unit of area, typically measured in people per square metre or yard. While "area per person" can be used to express crowd density, it's more common and often preferred to use "people per unit area".

Not to be confused with: Critical crowd density when the number of people in a space becomes so high that it impacts their ability to move freely and safely. Critical crowd density arises from excessive crowd density and is indicative of an unsafe space, which may or may not be a part or all of that same space. This critical density can be different for different events/ crowds.

Significance: Higher densities increase the risk of crowd accidents, making crowd flow management essential.

GCMA I WORDS MATTER 3/8

Crowd Dynamics

/kraʊd/dʌɪˈnamɪks,dɪˈnamɪks/

Crowd dynamics is the study of how crowds form, behave, and move over time. Key influences include space design, information flow, communications and management strategies.

Significance: Understanding crowd dynamics helps predict and prevent dangerous crowd behaviour by ensuring effective crowd management strategies.

Crowd Flow (aka Flow)

/kraʊd/fləʊ/

The rate at which people move through a space, usually measured in people per metre (or yard/feet) per minute.

Significance: Essential for ensuring that crowds move safely and efficiently, avoiding congestion or bottlenecks. Maximum flow rate at optimal density: 82 people per metre per minute. or 75 people per yard per minute.

Crowd Flow Management

/kravd/fləv/'manidzm(ə)nt/

Strategies and tactics to manage the flow of people through a venue, such as barriers, pathways and signage as well as human intervention to provide direction and information to support other methods.

Significance: Helps to maintain order and safety by directing crowd movement, reducing the risk of overcrowding and crowd incidents. Flow rates can be affected by several factors, including audience profile, terrain, and ground conditions.

Crowd Management

/kravd/'manidzm(ə)nt/

"The systematic planning for, and supervision of, the orderly movement and assembly of people." (Ref: Fruin JJ 1993). Crowd Management involves projecting occupancy levels and ensuring capacity is not exceeded; designing and managing routes for ingress and egress; overseeing processing procedures such as ticketing and security searches; and anticipating likely group behaviours and event activities.

Not to be confused with: Crowd Safety, Crowd Control (Crowd Management is something that happens *with* the crowd, ideally, whereas Crowd Control is something that happens *to* the crowd.) **Significance:** As a proactive discipline, crowd

management prevents incidents by maintaining safe limits, optimising flow, and addressing emerging risks before they escalate. Fundamental for preventing incidents before they occur.

Crowd Manager

/kraʊd/'manɪdʒə/

A crowd manager is a competent person responsible for overseeing crowd behavior, monitoring density & flow, identifying risks, communicating, and facilitating evacuations or other emergency procedures during events or within assembly spaces.

Not to be confused with: Event Security (often overlapping but with different goals, training, and responsibilities), Safety Manager, Health & Safety, Occupational Safety.

Significance: Crucial for maintaining situational awareness and dynamic decision-making during live events. Crowd managers are often the first to detect early signs of congestion, distress, or noncompliance, allowing for rapid intervention before issues escalate. Their presence ensures that crowd safety strategies are actively monitored and adapted in real time, reducing the risk of incidents and enhancing the overall resilience of crowd management plans.

Crowd Monitoring

/kraʊd/ˈmɔʻnɪtərɪŋ/

The continuous observation and management of crowd conditions during an event.

Significance: Ensures that any emerging risks or issues are identified and dealt with before they escalate into major incidents.

Crowd Safety

/kraʊd/ ˈseɪfti/

The proactive measures taken to ensure the safety of individuals in a crowd, including preventing overcrowding, managing crowd movement and responding to potential emergencies. It covers many disciplines that include, but are not limited to maths, physics, physiology, psychology, anthroponomy (measurements and proportions of the human body) and learned behaviours such as heuristics.

Not to be confused with: Crowd Control, Crowd Management

Significance: Prevents incidents and ensures the health and well-being of individuals in a crowd,

GCMA I WORDS MATTER 4/8

particularly in large gatherings. Important in preplanning stages of an event.

Crowd Science

/kraʊd/ˈsʌɪəns/

A multidisciplinary field of study that focuses on understanding the behaviour of crowds and developing strategies to ensure their safety in various settings. (O'Toole et al., 2019a, Still et al., 2020)

Significance: Provides the scientific foundation for crowd management strategies, helping to anticipate potential risks and behaviours.

Crowd Surge

/kraʊd/sɜːdʒ/

A crowd surge is a sudden, rapid movement of a large group of people, often in a confined space. While crowd density is a contributing factor, there is often some sort of inciting event or incident that acts as a catalyst to get large numbers of people moving in the same direction at the same time.

Significance: Crowd surges can lead to asphyxiation, crushed injuries, and even death.

DIM-ICE

/dim/nis/

DIM-ICE is an acronym, referring to the three primary influences on crowd behaviour:

- Design: The layout and structure of the space
- **Information:** The flow of communication to the crowd (e.g., signage, announcements).
- Management: The strategies and tactics used to control crowd movement.

During three phases:

- Ingress: Entry into the venue.
- **Circulation**: Movement within the space.
- Egress: Exit from the venue.

Significance: DIM-ICE provides a framework for understanding and managing crowd behaviour, ensuring safe and effective crowd movement. (Ref: G.K.Still)

Emergency Response Planning (aka Emergency Planning)

/ɪˈməːdʒ(ə)nsi/rɪˈspɒns/ˈplanɪŋ/

The preparation of plans, procedures and protocols for responding to emergencies, including evacuations, medical incidents, or security threats. **Significance:** Ensures that all reasonably foreseeable crowd-related emergencies are anticipated and managed in a timely and efficient manner. Particularly important for events hosting large crowds.

Egress

/ˈiːgrɛs/

The action of going out of or leaving a place. The phase during which people depart from a venue, space, or environment — either gradually or rapidly, depending on conditions.

Significance: Egress is a high-risk phase where movement can become unpredictable, and the potential for congestion, confusion, and accidents increases. Factors like terrain, lighting, signage, and crowd behaviour all influence safety. Crowds are especially vulnerable during this time — not only to targeted attacks, but to hazards arising from the movement itself. As the final interaction with a venue, it also shapes lasting impressions of the event. See also **Crowd Flow.**

Evacuation

/ɪˌvakjʊˈeɪʃ(ə)n/

The act of moving individuals from a dangerous or hazardous area to a place of safety. In the case of crowds, this process involves the physical movement of people. Evacuations can occur before, during, or after a hazardous event.

Significance: A well prepared and well rehearsed evacuation plan, with clear procedures and designated routes ensures that individuals can swiftly and safely move away from danger to a safer location.

GCMA I WORDS MATTER 5/8

Ingress

/'ingres/

The action or fact of going in or entering; the capacity or right of entrance.

Significance: During ingress and egress phases, crowds are often most vulnerable; to hazards arising from the movement itself and to targeted attacks. Often, it is a visitor's first impression of an event. See also **Crowd Flow.**

Invacuation

/ɪnˌvæk.juˈeɪ.ʃən/

The act of moving people to somewhere safe inside a building, when there is danger outside or in another part of the building.

Significance: An invacuation plan, with clear procedures ensures that individuals can swiftly and safely move away from danger into or to safer parts of the premises.

Panic

/'panik/

The natural emotional response when survival is threatened.

Common senses

- Individual fear: "Sudden uncontrollable fear or anxiety" (Oxford English Dictionary).
- Mass contagion: Rapid spread of fear through a group (e.g. panic in the market).
- **Verb:** To behave irrationally under fear (e.g. they panicked).
- Emotional/physiological: sudden fear or arousal (racing pulse)
- **Cognitive:** perception or belief of threat, often disproportionate
- Behavioural: flight movements, possible abandonment of norms, selfish or competitive acts

These overlapping senses, and the words' use as a vague catch-all, make "panic" too imprecise for crowd-safety commentary. Invoking "crowd panic" has also been a way to blame public psychology for disasters better explained by negligence or mismanagement. Decades of social-science research find that most evacuations involve cooperation and rational flight, not irrational mass panic.

Not to be confused with: Flight response: purposeful, often signalled movement away from

threat.

Significance: People do not die because they panic; they panic because they are dying. Media sensationalism of "panic" reinforces misconceptions about uncontrollable behaviour, obscuring the true mechanical causes: density, design or management failures, overcrowding, crush, collapse, asphyxia, that must be addressed.

Progressive Crowd Collapse

/prəˈgrɛsɪv/kraʊd/kəˈlaps/

A situation in which a group of people falls onto one another in a chain reaction, like dominoes toppling, often leading to serious injuries or fatalities.

Not to be confused with: Crowd Crush, Stampede **Significance:** A critical incident that requires immediate intervention to prevent further harm.

Risk Assessment

/rɪsk/əˈsɛsm(ə)nt/

The process of identifying potential risks, vulnerabilities and mitigation strategies within a venue or event space, including assessing likely crowd behaviours in both normal and emergency situations.

Significance: Crucial for preventing crowd-related accidents by identifying and managing risks before they manifest.

Showstop

/ʃəʊ/stɒp/

A predefined, rapid and coordinated response to an emergency or incident that poses a risk to life or serious harm during a performance or event.

It's designed to halt the performance and initiate proportionate responses, such as providing information to the crowd, directing individuals to climb down from temporary structures, or providing medical intervention, to prevent escalation of risk to the audience, performers, and staff. There may be a show restart, crowd egress or evacuation following a Showstop.

Not to be confused with: Show pause. It should be Showstop or Restart only.

Significance: A crucial safety measure designed to halt a live performance immediately and in a controlled manner to protect the audience and performers from immediate danger.

GCMA I WORDS MATTER 6/8

Stampede

/stam'pi:d/

A situation where a crowd runs away from a real or perceived threat, often resulting in chaotic and dangerous crowd conditions. This type of crowd event occurs when people have room to run or walk. This is usually an effect, NOT a cause of a disaster.

Not to be confused with: Crowd Crush, Crowd Collapse, Crowd Surge, Progressive Crowd Collapse Significance: The word 'Stampede" is often misused to describe the root cause of crowd disasters. It implies individuals overreacting, lacking behavioural control, or thinking irrationally. Further, the word can have a dehumanising effect on a disasters' victims. When misused, this description wrongly places blame on crowd members, when understanding the true cause is key to preventing future incidents. When discussing stampede-like conditions, consider using more neutral terms, such as "surge" or "flight".

Note: Stampedes typically occur after a crowd becomes scared, or excited. The trigger can be as little as an unexpected noise or the sight of fearful behaviour in others.

Venue Design (or Site Design)

/'vɛnjuː/dɪˈzʌɪn/

The planning and construction of a venue or event space to ensure safe entry, exit, and crowd movement in both normal and emergency situations.

Significance: Effective venue design can help minimise risks by controlling crowd flow and providing adequate emergency exits.

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GCMA I WORDS MATTER 7/8

^{*}In-text (APA): (Global Crowd Management Alliance®, 2025).

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GCMA I WORDS MATTER 8/8