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Unplanned Event Risk Legacy and Place-making involving Mass Gatherings

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Abstract

The 2022 Itaewon Halloween tragedy highlighted the urgent need to understand and mitigate risks in unplanned mass gatherings. There is currently no established framework for identifying, evaluating, and disseminating the legacy of mass gatherings at unplanned events. This lack of structure presents significant risks to the health and safety of participants at non-ticketed events. Using a qualitative research approach involving an integrated literature review, a case study, and a best fit framework, this paper examines the validity of the World Health Organization (WHO) standard health legacy framework for unplanned events involving mass gatherings and highlights critical areas for further research. Specifically, the current research updates and streamlines the WHO framework, incorporating a risk legacy from a recent unplanned event, and advocating clearly defined stakeholder responsibilities. Further, this study seeks to contribute valuable insights for place-makers, inviting a critical awareness of unplanned events involving even smaller mass gatherings and their stakeholders.

Keywords: unplanned event; mass gathering; place-making; risk management, Itaewon; Seoul; Halloween; social media

Unplanned Event Risk Legacy and Placemaking involving Mass Gatherings

Introduction

This research delves into the often-overlooked domain of unplanned events, which, unlike *planned* events, lacks in-depth scholarly exploration. Characterised by spontaneity and unpredictability, unplanned events with mass gatherings of people possess an elevated risk of causing fatal accidents, particularly when not initially perceived as being traditional organised events. The tragic incident during an unplanned Halloween celebration in Seoul's Itaewon district on October 29, 2022, resulted in the loss of nearly 160 lives (Choe, 2023), and underscores the critical importance of understanding and mitigating the challenges posed by unplanned (or spontaneous) events.

There is currently little knowledge of a framework or a standardised approach to identifying, evaluating and disseminating the legacy of mass gatherings at unplanned events. Using the World Health Organization standard health legacy framework (WHO, 2015), and the ISO 31000 risk management framework (a set of guidelines developed by the International Organization for Standardization), this paper reviews the mass Halloween gathering at Itaewon, shedding light on the ambiguity of existing frameworks when mobilising the primary stakeholders to support the unplanned event.

In contrast to the predominant focus of mass gathering at planned events in existing literature (FitzGibbon et al., 2017; Memish et al., 2019; Zumia et al., 2016), the Itaewon Halloween incident contributes to unplanned event risk management theory by highlighting the significant role of 'place-makers' in mass gatherings. This research aims to provide valuable insights into unplanned events and their

stakeholders, by streamlining the WHO health legacy framework for future research on unplanned events or mass gatherings.

To fully appreciate the discussion in this study, it is essential to recall the Itaewon Halloween disaster in 2022.

Background

On October 29, 2022, a tragic crowd crush occurred in Itaewon, a popular nightlife district in Seoul, South Korea, during Halloween festivities. An estimated 1,000,000 people packed the streets for the first virtually unrestricted Halloween festivities in three years since the COVID pandemic (The Guardian, 2022). The incident resulted in the deaths of over 150 people, with hundreds more suffering injuries, but the psychological trauma has extended to uncountable individuals throughout the country, especially the families, rescue workers, and businesses in Itaewon. Unlike a traditional organised event, Halloween in Itaewon is a spontaneous celebration where young people dressed in costumes, hop from bar to club (Yeung & Rebane, 2022). The narrow alleyways of Itaewon were unable to accommodate the large crowd that had gathered for the Halloween celebrations and victims were caught in a narrow alleyway (only 3.2 metres wide) that connected the main street of Itaewon to the restaurant, bar, and nightclub area. This led to a dangerous level of overcrowding, making it difficult for people to move freely. As the crowd became increasingly dense, panic set in, leading to a loss of control and a stampede-like situation in the alleyway, which was later declared a ‘crowd crush’. There were insufficient police and emergency personnel on the ground to manage the large crowd, contributing to the chaotic situation. The tragedy sparked widespread grief and mourning throughout South Korea.

The background of Itaewon Halloween sets the stage for a deeper exploration of existing research. The following literature review will analyse key studies relevant to the case, allowing gaps in current knowledge to be identified, and demonstrating how the current research contributes to the field of knowledge.

Literature Review

Crowd research relating to mass gatherings is spread across various disciplines and needs to be integrated in order to develop practical applications (Torraco, 2016). An integrative review not only points researchers towards unexplored territories, it also provides a fresh perspective on established research landscapes (Cronin & George, 2023). This review examines the current scholarly literature on place-making and risk management within the context of unplanned events and mass gatherings. Through a retrospective and critical analysis of the Itaewon Halloween disaster, along with mass gatherings for religious events, this study highlights the gaps inherent in the World Health Organisation (WHO) standard health legacy framework.

Planned versus Unplanned Events

> Planned event are live, social events created to achieve specific outcomes, including those related to business, the economy, culture, society and environment. Event planning involves the design and implementation of themes, settings, consumables, services and programmes, that suggest, facilitate or constrain experiences for participants, guests, spectators and other stakeholders (Getz, 2012, p.40).

According to Getz and Page (2019), planned events are characterised by their structured nature and predetermined goals, although the distinction is sometimes blurred (Getz, 2012). They are typically organised by professional event designers

and managers, who carefully plan and schedule every aspect of the event. Unplanned events, in contrast, are spontaneous and unpredictable. They often emerge from the interactions and desires of individuals or groups, and their purpose is not always clearly defined. The nature of unplanned events can pose many risks to civic officials and businesses; there are usually no management systems in place, and therefore they lack control. There are occasions where a police response is required, which can escalate the uncertainty and risks, and blur the expectations required of the unplanned events; there is no accountability on the part of individuals, organisations, or any legal entity (Getz & Page, 2019).

Whether an event is planned or unplanned, there is a degree of planning in events considered to be at the margin, in-between the two. Such marginal unplanned events have been referred to as ‘flash mobs’ (Tan & Bakar, 2015), protests, demonstrations, riots, and recreational rioting (Getz & Page, 2019). This paper discusses an unplanned event in a popular district in Seoul during Halloween, and in particular, invites researchers and practitioners to consider spontaneous events during and outside of the Halloween period.

Unplanned/Organic Place-making and Risk

In order to gain further insights into unplanned events, this section reviews the composition of unplanned or organic place-making. ‘Place-making’ can refer to both the intentional and planned creation of places (usually initiated from top-down), as well as to the more spontaneous and unstructured approaches (usually initiated from the bottom-up) (Lew, 2017), the latter of which in the context of this study is representative of the atmosphere and ecosystem of Itaewon from its earlier days. Henceforth in this paper, the term 'planned place-making' will refer to initiatives undertaken by the public sector or government, while 'unplanned place-making' will

refer to organic initiatives carried out by community members or other informal groups. The term 'formal place-makers' will denote those involved in structured, government-driven efforts, while 'informal place-makers' will refer to community members actively contributing to shaping their environment.

Planned place-making often takes the form of themed shopping areas and entertainment venues designed to attract both locals and visitors. These pedestrian-friendly spaces, often found in city centres, offer a variety of shops, restaurants, and activities (Gottdiener, 2001; Lew, 2007; Paradis, 2004). Unplanned place-making, better known as bottom-up place-making, or organic place-making, sits on a continuum with planned place-making (Hultman & Hall, 2012) and may not be easily differentiated from the latter during an unplanned activity in a public space. In 2024 on the official website of the Itaewon district, the only annual festival promoted and organised by the district's manager (the Itaewon Tourism Special District Association), was the Itaewon Global Village Festival (Itaewon, 2024). The Itaewon Halloween event that occurred on 29 October 2022, appears to have been an unplanned activity scheduled by place-makers, i.e., individuals or a community of various social groups.

The unpredictability and potential risks associated with large-scale unplanned activities should not be overlooked, even though they can offer unique experiences for visitors. Planned activities often involve the government or developers in a location, and are associated with measures that are safe, known, predictable and familiar (Lew, 2017). As event scholars produce more work in the realm of places, place-making and large-scale events, it is critical that all place-makers (formal and informal) learn from Seoul's case in ensuring public health and safety.

Partying is an important aspect of place-making, contributing to a shared sense of community, and allowing playful exploration of the geographies, social interactions, and everyday functions of a place. Itaewon Halloween provided outsiders with an impression of a Halloween Street party in Seoul, without it being an organised event. According to Stevenson (2019), “on-street partying can create place-making opportunities but also presents some challenges to decision makers” (p. 315). The informal, spontaneous nature of these events can lead to organisational ambiguities and political risks. In particular, the lack of a clear event organiser or responsible party, can make it difficult to manage and regulate this type of gathering. This can create inequalities, as the party may only benefit certain segments of the community. Furthermore, the ad-hoc organisation prevents residents from accessing funding, potentially hindering event management and safety measures. Without formal structures or resources, there is a risk of overcrowding and inadequate crowd control, such as in the case of Itaewon. The unpredictable nature of parties, while enjoyable, can lead to positive social interactions, as well as negative behaviours, such as antisocial conduct or the exacerbation of existing tensions. Stevenson’s article also comments on the ‘herd mentality’ of a crowd that ‘goes with the flow’—so much so that attendees to these unplanned events could regard it as a pilgrimage where they experience a feeling of camaraderie and shared identity, as in a tribe or a religious group.

Unplanned Mass Gatherings

Spontaneous events are more difficult to plan and respond to due to their ad hoc nature (WHO, 2015). Nonetheless, some planning is essential in order to have proper emergency plans in place to ensure public health and safety. Strategies to manage unplanned events involving unexpected crowds, or mass crowds without

organisers, have not yet been adopted in the Korean field of emergency management (Ha, 2023). The word ‘mass’ could be misleading when undergoing risk assessment. Mass gathering is often assumed to occur at large events, but this may not always be so. Accidents and crises can occur at a smaller event that brings about a gathering of people larger than the regular capacity of a place or space. Mass gatherings, as defined in research, can typically involve as few as 1,000 people, although some literature defines a mass gathering as having in excess of 25,000 people (Cordell, 1993, cited in Michael & Barbera, 1997; Sanders et al.,1986). A broader definition suggests ‘any group of people who gather for a shared purpose in a specific location, regardless of the size of the group’. Gatherings can last from a few hours to several days, and even when some medical care is provided on-site, mass gatherings can still put a strain on local hospitals and emergency medical services (Sanders et al.,1986, cited in Michael & Barbera, 1997).

Crowd Behaviour

Mass gatherings, as defined in emergency medicine, are organised events that take place in temporary structures or outdoor areas, and attract a large number of people. These events can hinder emergency response efforts from local, state, or national authorities, due to limited access or other obstacles (Arbon et al., 2001; Arbon, 2004; Lund et al., 2011). Parades and festivals are examples of events that bring together large groups of people. Similar to pilgrimages, the social atmosphere becomes more intense as crowds gather and move towards the event location (Hill et al., 2022). According to Helbing and Mukerji (2012), it is equally important to consider the crowd’s behaviour and reactions during a disaster, to ensure that an organisation is as resilient as possible to the most unfavourable factors involving mass gatherings. For example, human behaviour alone cannot be judged purely by

the violent behaviour in a crowd, but it should also be considered in scenarios where people have no room to act for themselves. Contemporary crowd behaviour research increasingly emphasises cognitive and psychological factors. As highlighted by Haghani and Sarvi (2018), understanding the diverse and contextually dependent nature of human behaviour within a crowd is crucial. Barr et al., (2024) challenged the traditional notions of panic and stampede by rejecting mass panic. They proposed that crowd flight behaviour in response to threat is not uncontrolled, but rather, normatively structured, and suggested that to understand and prevent crowd disasters, the ways that people behave in groups, how they perceive their surroundings, and how the physical environment affects their movements, needs to be observed, rather than just making the assumption that crowds will panic in emergencies. Barr et al. have developed a new model to understand crowd crush disasters, incorporating the idea that limited information about obstructions, combined with crowd density and normatively expected ingress behaviour, can lead to crushing disasters.

The Expected Number of People on Site, not the Venue Capacity

A typical crowd disaster often involves a combination of factors, including congestion points that lead to overcrowding, organisational inefficiencies, communication breakdowns, poor decision-making, coordination issues, and the chaotic behaviour that can occur when large numbers of people are packed together tightly (Helbing & Mukerji, 2012). Previous lessons from previous disasters, e.g., the 2010 Love Parade, an electronic dance music festival and techno parade, in Duisburg, Germany, and in particular, the repeated crowd disasters at religious pilgrimages, reveal that an event should be planned on the basis of the *expected*

number of people and not on the capacity of the venue—the same principle should be applied in the context of unplanned events.

Crowd crush disasters have been studied more intensely following the Itaewon disaster (Chang et al., 2024; Ha, 2023; Haghani & Lovreglio, 2022; Liang et al., 2024). According to crowd management experts, crowd crush typically occurs during mass gatherings where the crowd density increases beyond a safe level. These events can be triggered by various factors, including overcrowding, disorderly behaviour, and the lack of effective crowd management. The physical forces within a densely packed crowd can cause individuals to be unable to move or breathe, leading to fatalities from compressive asphyxia (Chen et al., 2023; Ha, 2023; Mao, 2023).

Research also suggests that the 2022 Itaewon Halloween disaster could have been prevented, as modern technologies are available to mitigate the risks of crowd crush. In Itaewon, the communication system was overtaken by the social community, demonstrating a flaw in the area's emergency management systems. Furthermore, a report by the Department of Fire and Disaster Prevention at the Chongsil University in South Korea, revealed that a Halloween emergency response counter-measure meeting had been held. However, it was noted that the safety management measures planned for large-scale crowd gatherings was not carried out (Mao, 2023).

Legacy Planning

> "Leaving a viable public health legacy and sustainable improvements in the health infrastructure and capacity should be a key aim of those involved with preparing for any MG (Mass Gathering) (WHO, 2015, p. 9)."

The term ‘event legacy’, used in the context of mega events such as the Olympic Games, often captures the value of sporting facilities and public infrastructure that remain in place after the events are over. These assets are often transferred to local communities or sports organisations. Although possibly taken for granted, the legacy of past and forthcoming mass gatherings of varying sizes should also be examined when planning for future events, even those that are unplanned. The word ‘legacy’ often connotes a positive inheritance for the host destination of an event. However, according to Preuss (2019), just as a positive legacy can enrich a city, a negative legacy can be seen as a warning for others. Preuss has written at length on Olympic Games legacies over the years, and there is much that can be applied to mass gathering types of events. For example, legacy development starts with planning and should be treated as a continuous effort. To ensure stakeholder involvement, plans for evaluating the legacy should be considered from the beginning, at the pre-event stage (WHO, 2015).

Building on the themes and gaps identified in the literature review, this study employed a best fit framework synthesis approach to systematically analyse and synthesise existing research.

Methodology

The study adapted an integrative literature review methodology to a case study using a best fit framework synthesis. The integrative literature review approach was particularly suitable for synthesising diverse literature on crowd management across multiple disciplines, integrating past research with current practices. A multidisciplinary approach was crucial, as it enabled an integration of insights from psychology, sociology, and computer science, to better understand the topic in question (Torraco, 2016). The integrative review method is particularly suitable for

examining complex phenomena in nursing and healthcare, which can be extended to risk or crowd management research. The method's strength lies in its ability to not only summarise existing knowledge, but to also generate new perspectives and frameworks that can guide future research and inform policy decisions (Russell, 2005). The Itaewon Halloween case study was chosen as a case study to allow for in-depth evaluation of a real-world situation (Yin, 1992).

Given the availability of existing risk management frameworks, this study employed the best fit framework approach, a method that requires the identification of a relevant framework, theory or conceptual model as the foundation of the study (Carroll et al., 2013). It is then reduced to its key elements or variables, which form the themes of the *a priori* framework for future research. This study selected two international frameworks related to risk management and mass gatherings as its foundation to enhance generalisability for unplanned events: The WHO standard health legacy framework (see Figure 1) and the ISO 31000 risk management framework, revised in 2018 (ISO, 2018) (see Figure 2). Emerging themes were then teased out for further discussion. The outcome of the study is an unplanned event/mass gatherings public health and safety legacy framework that takes into account the crisis experienced in the case study, thereby fulfilling the aim of the study, i.e., to provide an *a priori* framework with a structured approach for initial data extraction and analysis in future studies. By synthesising the thematic and framework analysis, a less problematised perception of the reality is assumed for direct application by policy makers and designers of interventions (Carroll et al., 2013).

Foundation of Study: The WHO Standard health legacy framework (2015) and ISO 31000: 2018 Risk Management Framework

The standard health legacy framework was introduced in the WHO's 2015 report, Public *Health for Mass Gatherings*. The framework drew on experiences from past mass gatherings to provide tactical knowledge. According to WHO, while spontaneous mass gatherings can be more challenging to plan for, experience with planned mass gatherings can be transferrable. In the current paper, a comparison is made between two international risk management frameworks, to identify the salient variations between (1) The WHO standard health legacy framework (see Figure 1), and (2) the ISO 31000 Risk Management Framework, revised in 2018 (ISO, 2018) (see Figure 2). The current WHO framework appears to be comprehensive but could be streamlined to facilitate application for unplanned events. The latter framework was used for organisational risk management and not specifically for event management, but is a credible framework that has also been applied in park and recreational activities by Uzuner and Sertbas (2017). It is also unclear who is responsible for scope of duties on both frameworks. Given the gaps, there is a clear need for a new framework for unplanned events.

Training

'Training' emerges multiple time in WHOS's standard health legacy framework. A key to managing risk is the communication of risks to all stakeholders at the delivery stage. Effective risk communication should be complemented by comprehensive training and exercises for all stakeholders. The Itaewon tragedy drew attention to the critical role of 'public preparedness'. In the absence of sufficient on-site emergency personnel, civilians stepped in to administer CPR (Cardiopulmonary resuscitation) to casualties. A more extensive training programme in first aid

involving stakeholders in Itaewon (e.g., businesses and their staff) could have potentially increased the number of lives saved.

Human and Cultural Factors

Other elements that stand out are human and cultural factors (see Figure 2: ISO Risk management framework). Although not explicitly featured in the WHO framework, these were also identified in their report. Risk communication is evolving in tandem with changes in behavioural science. Observing and understanding social behaviour is becoming a valuable and affordable way to address various behavioural issues in different groups of people. In contrast to the WHO framework, the ISO framework extends to cultural factors (see Figure 2, Principles). Human behaviour across different cultures is a complex area that is worthy of further investigation. This paper posits that longitudinal studies may be necessary to observe cultural habits and the repercussions they may carry into mass gatherings, and that cultural habits require a longer time to change. Drawing on new research into behavioural science, although more from a humanistic perspective, WHO's report also predicted a trend of risk communicators moving away from a purely scientific approach to gathering intelligence, towards the development of interactive communications that take into account cultural and social factors that shape people's understanding of health risks at mass gatherings. This observation is particularly crucial given the recurring nature of mass gathering disasters.

Society and Social Media

The word 'surveillance' is specifically mentioned in the WHO framework, highlighting the critical importance of risk communication not only by the event organiser, but also members of the public. Several sources of news revealed that reports relating to the risk of crowd crush at the Itaewon Halloween event were

evident earlier on social media. However, since social media was not considered to be a regular (or official) medium of risk communication, warnings about accelerating risks did not reach the relevant authorities. The World Health Organization highlighted the need to integrate data from multiple sources (e.g., surveillance cameras, laboratories, the intelligence community, and media) into succinct reports for decisions makers. More importantly, the platform for reporting or communicating risks should be accessible and/or connected to the various triage services. The lesson from Itaewon's tragedy is that real-time communication of risks, and real-time situation awareness, are crucial in an emergency. In fact, real-time situational analysis, facilitated by drone-mounted surveillance cameras, has emerged as an advanced risk management strategy for monitoring large-scale events. This approach offers superior effectiveness compared with traditional fixed-camera systems (Al-Dosari et al., 2023). Future research could look into the effectiveness of new technologies in mitigating risks at mass gathering events.

<<<INSERT FIGURES 1 AND 2 HERE>>>

Having applied the best fit framework synthesis approach, the analysis revealed several key themes.

Discussion and Conclusion: Who is Responsible?

The World Health Organization (2015) urged researchers to address both planned and unplanned events, including the question of how public health strategies designed for planned events could be adapted for unplanned events, and vice versa. Although the two frameworks displayed in Figures 1 and 2 are comprehensive, it remains unclear which stakeholder should be responsible for carrying out the defined tasks. This is due to the systemic nature of many crowd disasters, which makes their legal handling very challenging as it is often difficult to

determine the proportion of responsibility that the different stakeholders and institutions have. This is even more difficult for an unplanned mass gathering, where capacity is not managed by an actual event organiser. Without a proper response to such systemic failures, people are losing their trust in public institutions, which undermines their legitimacy. Meanwhile, researchers and practitioners have expressed their conviction that the division of responsibility itself is the problem, and have called for political and regulatory attention. Helbing and Mukerji (2012) suggested that scientists could make a significant contribution to humanity's cultural heritage by finding new ways to address this fundamental problem. Attention to these issues could foster a more educated and prepared society, capable of supporting and assisting place-makers, even without formal management structures for unplanned events. While this may enhance public trust and contribute to a safer, healthier, and more resilient community, the root of the problem often lies in the ingrained societal and cultural behaviours exhibited during crowd disasters. According to Helbing and Mukerji, more specific descriptions of the systemic problems are part of the scientific challenge, as solutions often rely on empirical evidence. These solutions may also be subjected to influence by value systems and priorities. Helbing and Mukerji invite divergent perspectives on the same problem from researchers, as these can lead to fruitful outcomes.

In order to support the move towards future studies, this paper highlights the critical need to streamline the standard health legacy framework for unplanned events. The framework is made operational by including stakeholders with the prescribed tasks (see Figure 3). By reflecting on the discussed themes and also iteratively considering the roles of the primary stakeholders in each function during the event cycle (pre-, during, and post-event), this paper invites event and risk

researchers to apply this framework for further investigation. The framework could also serve as both a preventive and evaluation measure during risk assessment processes. For future studies examining past events, it could also serve as an analytical framework for further investigation. It is not meant to be fixed, but rather, should be updated and revised on a regular basis for unplanned events. Investigation into past events could take the form of oral history interviews and written accounts from survivors (see also, Barr et al., 2024), rescue workers, business operators, residents, and even on-site civilian rescue volunteers. Netnography could prove to be an effective tool as in the case of Itaewon, the communications from the participants reporting at the scene of the event were mainly using social media.

<<<INSERT FIGURE 3 HERE>>>

In the case of Itaewon, an organiser may be missing from the picture, but this paper argues that the place-maker(s) should be accountable. It would be worth investigating the multiple roles played by stakeholders, taking into account that businesses were likely to be place-makers (formal), as well as the individuals or social groups on social media (informal) who initiated Halloween culture in Itaewon. Providers responsible for triage, and society in general, also play a crucial role in assessing and managing risks. Triage systems can differ from one country to another and therefore more research is required in this area. Ideally, triage systems should include the police, medical professionals, and counsellors. Additionally, where training is concerned, triage should assume the role of educating and training primary stakeholders, as part of their preparedness programme. In an emergency, all stakeholders should be mobilised, as triage services alone are not enough to attend an emergency such as that of Itaewon. Similarly, the framework in Figure 3 also

highlights the integration of surveillance systems to include members of society who have access to public communication systems via their mobile phones and social media—these types of communication tools should also be integrated. Overall, the framework emphasises the crucial roles of society, place-makers (formal and informal), event organisers, educational institutions, businesses, media, triage services, and local authorities (specifically local councils) in safeguarding the health and safety of event participants, regardless of whether the event is planned or unplanned, council-led or a grass-roots event.

In summary, more effort must be directed at synthesising existing studies in planned events risk management, and transferring the knowledge gained into unplanned events. Event risk management does not rest on the event organiser or the place-maker alone, even for unplanned events. It rests on the community of stakeholders, as depicted in Figure 3. Longitudinal studies into outcomes from events, as well as a regular training, are necessary to provide all stakeholders with the tools to respond to any emergency. While a single study may not fully integrate this framework into the broader context, the case of Itaewon and other mass gatherings is likely to yield greater valuable research outcomes.

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Figure 1

A Standard Health Legacy Framework (WHO, 2015, p. 27)

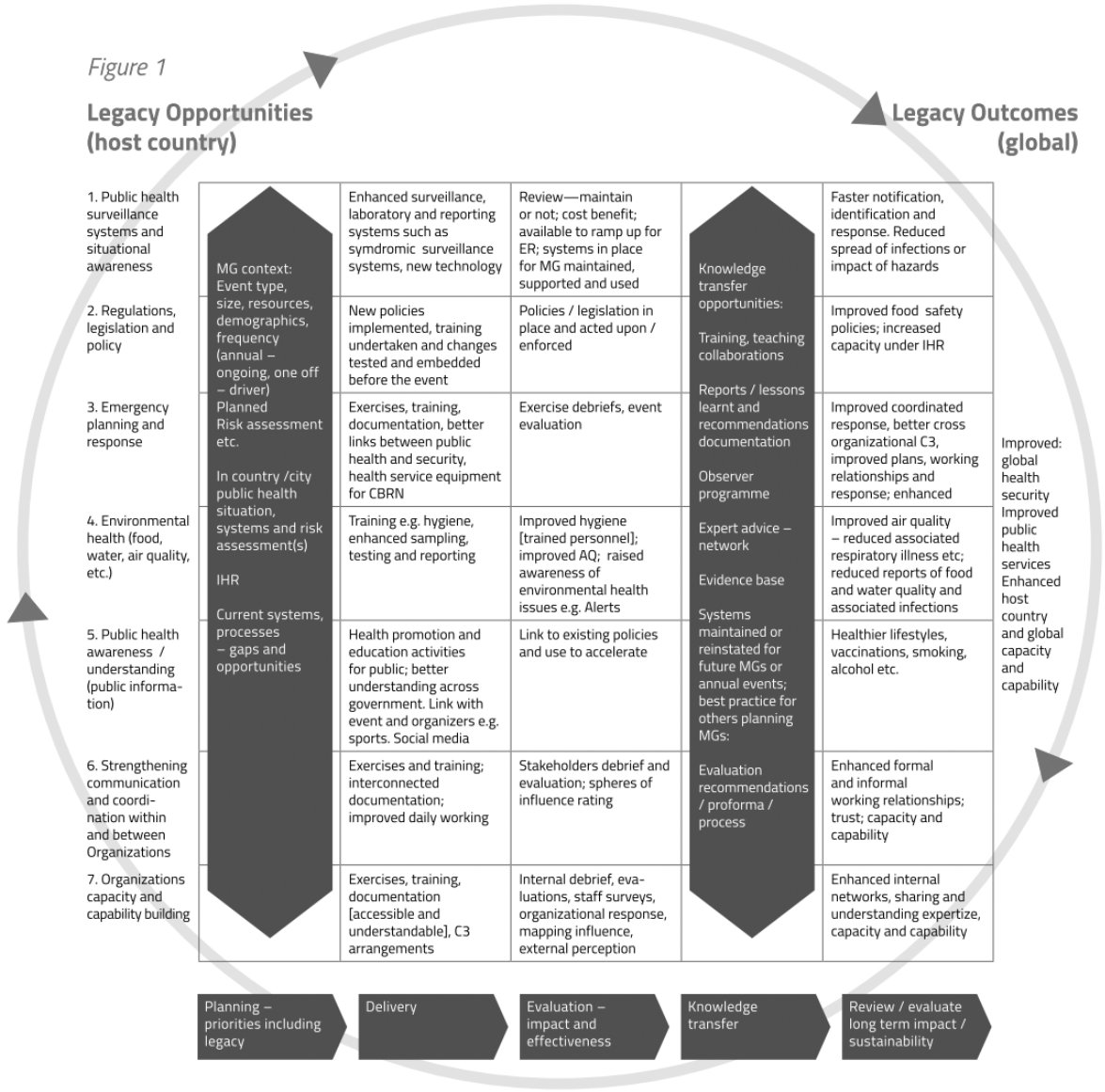

Figure 2

ISO 31000:2018 Risk Management: Principles, Framework and Process

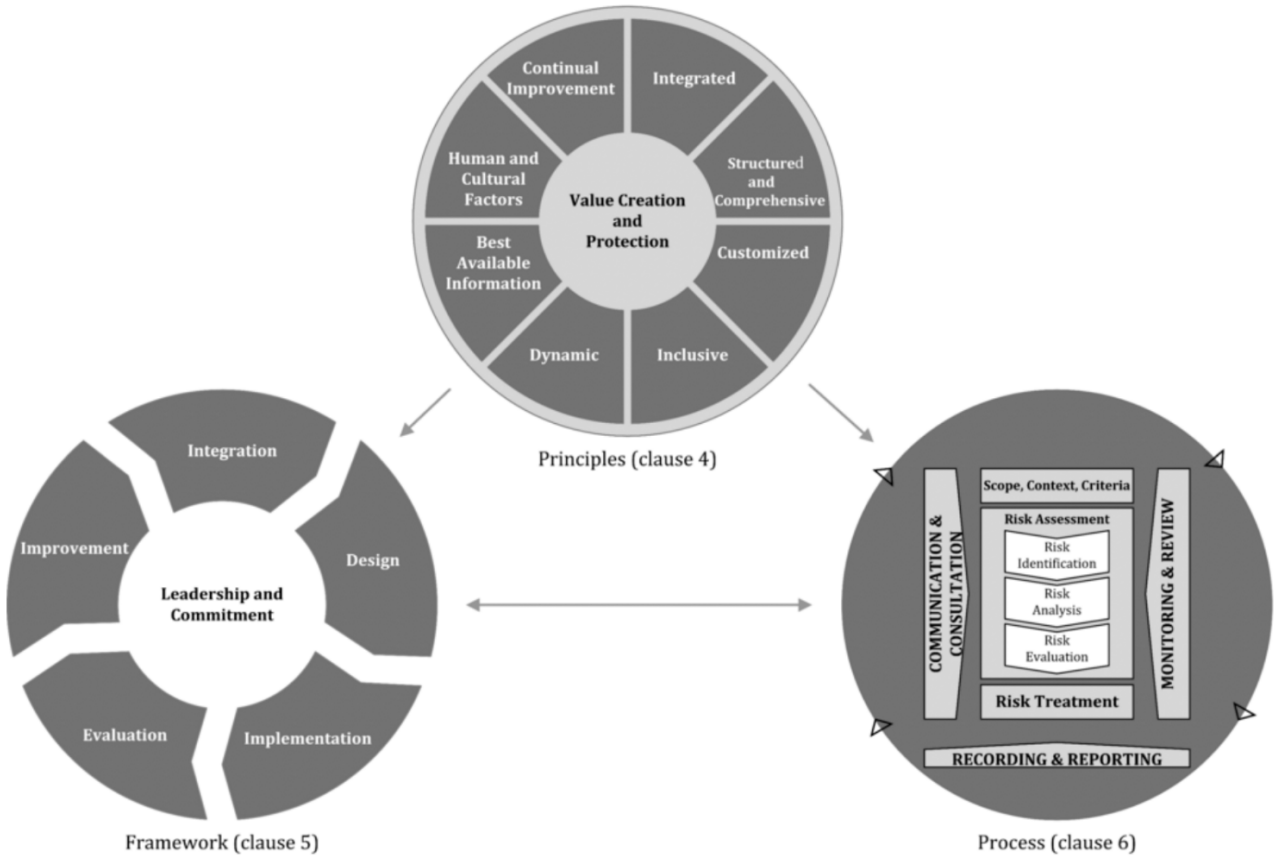

Figure 3

Unplanned Event/Mass Gatherings Public Health & Safety Legacy adapted from WHO's standard health legacy framework