

The role of social psychology in the management of mass decontamination

Over 50 years of research has shown that mass panic occurs very rarely (if at all) during mass emergencies, and that people typically behave in a cooperative and helpful way. Despite this, a recent review of decontamination guidance documents for emergency responders revealed that common myths about disasters, such as public disorder and panic, are present in guidance for emergency responders.

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This reliance on assumptions about mass panic has led to a focus on the need to control members of the public, who are seen as being likely to behave irrationally. The idea that people will behave irrationally has also contributed to a lack of effort being made to develop effective communication strategies for incidents involving decontamination – if people are going to behave irrationally, what is the point in trying to communicate with them?

This lack of focus on communicating with members of the public could have serious adverse consequences. We carried out a review of small-scale incidents involving decontamination, which showed that ineffective communication from emergency responders can result in reduced public compliance with decontamination, and increased public anxiety; this could delay the decontamination process, which could cost lives.

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There is therefore a need to update planning assumptions and guidance for incidents involving mass decontamination, so that they are based on relevant theory and research, rather than on outdated assumptions about disorder and panic. In particular, the development of effective responder communication strategies should be a priority; theory and research in the field of social psychology can play a key role in aiding the development of effective communication strategies.

Understanding public behaviour

To understand public behaviour during mass decontamination, and inform the development of an effective responder communication strategy, we reviewed several potentially relevant theories. These included health behaviour theories, normative theories of crowd behaviour, and the social identity approach. The social identity approach suggests that individuals have both personal and social identities, and that social identities can be based on group memberships. Individuals come to share a social identity when the

perceived differences between them are less than the differences perceived between themselves and others outside the group. The social identity approach provides an explanation for how a shared social identity can impact on relations between ingroup (those who share a social identity) and outgroup (a group with whom ingroup members do not identify) members, and the potential consequences of this in terms of dysfunctional outcomes such as non-compliance with responder instructions, and challenges to responders' authority.

The social identity approach has been used to understand public behaviour during various crowd events, including football crowds, protests, and riots. This research shows that it is essential that those managing the event (usually the police) communicate effectively with crowd members about any actions they are taking. Failure to communicate effectively can result in a perception that the police are acting in an unfair or illegitimate way, which can lead crowd members to try to challenge their authority.

The social identity approach is relevant to incidents involving mass decontamination, because mass decontamination involves a crowd of people, whose interactions with each other, and with the responders managing the incident, are likely to be crucial to the success of the decontamination process. During mass decontamination, emergency responders will be trying to get members of the public to comply with recommended decontamination processes. It is therefore essential that emergency responders are perceived to be behaving in a legitimate way; if responder actions are seen as illegitimate, members of the public may be unwilling to comply with recommended decontamination procedures.

Effective communication

We applied the social identity approach to understand public behaviour during mass decontamination. We used various different methods, including mass decontamination field exercises, an online visualisation experiment, and a mass decontamination field experiment. The field experiment enabled us to test the effect of three different responder communication strategies on public experiences and behaviour during mass decontamination, and to examine the role of social identity processes. During this study we were able to collect both behavioural data (timings for participants to undergo decontamination and observations of participant behaviour) and psychological data (quantitative and qualitative self-report data).

We found that when communication from emergency responders is perceived as being effective, this results in increased perceptions of responder legitimacy, and therefore strengthens public identification with



emergency responders. These factors in turn result in increased public cooperation, and increased public compliance with decontamination. Further, effective communication from emergency responders reduces public confusion, thereby improving the speed and efficiency of decontamination. Improving the speed and efficiency of decontamination, and increasing public compliance, could save lives.

Four recommendations

Four recommendations have been developed for responder management strategies, based on this research:

1. Responders should communicate openly with members of the public about the nature of the incident, and the actions, which are being taken
2. Responders should provide health-focused explanations about decontamination, to help those affected to understand why certain actions are being taken
3. Responders should provide sufficient practical information, to ensure that those affected know how to undergo decontamination (for example, instructions on how to progress through decontamination, and instructions on how to wash during the shower)
4. Responders should respect public concerns about privacy and modesty.

Applying recommendations from research

The four recommendations outlined above should be included in decontamination training and guidance for emergency responders. Some of these recommendations have been included in a hospital decontamination 'best practices' document prepared by the Harvard School of Public Health, and a patient decontamination guidance document prepared by the US Department of Homeland Security. Further, findings are also being used to inform an update to the UK decontamination model response programme. In the increasingly likely event that an incident of this type occurs in the UK, a communication strategy developed based on an understanding of social psychological factors, and including the four recommendations listed above, will enable the decontamination process to take place quickly and efficiently, and will result in lives being saved.

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