

Evidence to the Science & Technology Select Committee inquiry into science advice in relation to planning for and responding to chemical, biological, radiological or nuclear (CBRN) incidents – submitted by the Science Media Centre

Summary

- During crises such as the swine flu pandemic, volcanic ash cloud, Fukushima nuclear disaster or Ebola there is intense media speculation that heavily influences public opinion with wall-to-wall coverage that can last for months
- When top scientific experts engage with the press during this time there is more accurate media coverage and public debate is better informed
- A crisis playing out in the media is an opportunity as well as a threat. Scientists can get the best evidence heard and understood at a time when the media and public are highly engaged
- The government is getting lots right by thrashing out an agreed line informed by the very best science and communicating this effectively through the media
- However, the media will always demand alternative voices, so relying solely on a single authoritative message is not sufficient to ensure accurate coverage
- Furthermore, some of the processes government uses to inform itself of the science inadvertently risk denying the best experts to the media and the public
- Plus it means that government is missing an opportunity to have multiple voices all asserting the best available evidence, which is even more powerful than a lone one
- Small but significant changes would create a new situation in which the best experts both advise government and inform the media and public, which would be to everyone's benefit

Background

The Science Media Centre

1. This is a wide-reaching inquiry; the Science Media Centre (SMC) specialises in working with the 24-hour mass news media during crises and that is our sole focus here.
2. We were set up to ensure that more experts engage more effectively with the most contentious issues hitting the headlines and our 14 years of experience demonstrates time and time again that when the best scientists are made easily available to the media at times of crisis the media coverage is more accurate and measured and the public debate is better informed.

Government's role

3. The government has a huge role to play during a chemical, biological, radiological or nuclear emergency – one vital facet of which is keeping the public informed and giving them the best scientific advice on which they can base their decisions and behaviour.

4. At the same time, government itself needs the most accurate and up-to-date scientific advice in order to plan, manage and react to the unfolding crisis. This can mean huge amounts of time advising each department on what the crisis means for them.
5. There are four groups of scientists providing information to Government: (a) Chief Scientific Advisers; (b) scientists in Whitehall; (c) researchers at government-run scientific bodies and arms-length bodies (such as: Animal and Plant Health Agency (APHA); PHE Centre for Radiation, Chemical and Environmental Hazards (CRCE); Porton Down; Forest Research; Fera; National Institute for Biological Standards and Control (NIBSC); Centre for Environment, Fisheries and Aquaculture Science (Cefas); PHE Chilton; PHE Collindale); (d) independent scientists, often from universities, who are brought into the Scientific Advisory Group for Emergencies (SAGE) and Cobra meetings.
6. At present these separate four groups of scientists are focused primarily on informing the government and ministerial response to the crisis behind closed doors.
7. Having reached a conclusion a single spokesperson, or a small number of spokespeople, from central government and each relevant body/department is used to convey the message to the media and thus the public in an attempt to ensure that the key points are addressed consistently.
8. There is a large body of research evidence in the field of risk communication that demonstrates that in times of crisis public health is best protected when there is a single clear message coming from government. However, this ignores the fact that there will always be multiple voices conveyed through the media – this can be an opportunity as well as a threat.
9. In this evidence we are focusing not on the CSAs (group a) or the scientists in Whitehall (group b) – we accept that their priority must be advising government and ministers.
10. We are focusing on the latter two groups of scientists (c and d) as the SMC believes they could, and should, be informing the public and media as well as the government and ministers.

The media

11. We are very lucky in the UK to have leading specialist science, health and environment journalists who lead their organisations' coverage of these crises.
12. Many of these journalists view accurate and evidence-based reporting as an important part of their role and the SMC can demonstrate many cases from the past 14 years where they have done this extremely well.
13. Giving these journalists access to scientists and third party experts enables them to have greater influence on how their organisations report the story. We know many examples of journalists convincing their editors why it is important to include certain caveats, not use certain headlines, or why absolute risks need to be included as well as relative ones. They can only do that with the help of the best experts.
14. Specialist journalists will often be used as experts in their own right when introducing broadcast interviews and studio discussions. They often need to speak to scientific experts in order to get the background information for their own coverage, rather than to interview them.
15. Whilst the SMC is fully cognizant of the risk of poor reporting of crises, it is important to also recognise that society does need journalists to hold government to account and scrutinise

government decisions. The government should not see media scrutiny in the midst of crisis as an irritant to be avoided but as a necessary and important part of being held to account.

The bigger picture

16. Elected ministers and policy-makers make decisions, quite rightly, by getting the best scientific advice through CSAs, SAGE, Cobra, scientists who are civil servants in Whitehall and through advice from experts at Government-run institutions and arms-length bodies. There is much to recommend this system.
17. However, as Alastair Campbell taught us, all of this can be overturned by days of headlines and front pages that ignore the evidence and cause government to change its position. This matters because if the media and public demands simplistic solutions then ministers will follow suit. Many experts think this happened with calls for dredging during the 2014 floods.
18. It is therefore absolutely crucial that government sources of scientific advice are utilised not only by central and internal government, but also by the media and thus the public – otherwise all the discussions behind closed doors can be subverted by uninformed headlines.

The Challenge

Needs of the media

19. The media is a rolling 24-hour news beast that needs continuous feeding. Even a fairly large team all putting forth a single government message simply cannot cope with the demand for interviews, particularly as these crises often go on for weeks or months (as in the case of swine flu, Ebola and the volcanic ash cloud).
20. Even if the government does somehow always manage to have a spokesperson available, journalists will always demand independent third party voices to give a view on the government's plans or actions.
21. Furthermore, aside from views on government plans, journalists will also need to speak to people who can talk about the background information e.g. about mosquitos during Zika, about different types of radiation during Fukushima.
22. It inevitably takes time for government to arrive at decisions during a crisis. This can create a vacuum in the media during which they are still covering the story but no-one with expertise is able to comment. This vacuum should be filled with third-party experts, as happened with polonium-210; during the first few days, before government was able to make a statement, the poison was originally thought to be thallium and then radioactive thallium. Third-party experts were able to discuss the consequences if this was found to be the poison.

Scientists being swallowed up by government

23. In the best case scenario the media will seek authoritative, independent experts, often through the SMC. However, often the experts we first turn to are the same ones upon whom government relies and unfortunately they can be swept up into SAGE and lost to the wider public - not because they are banned from speaking to the media, but because they are not explicitly given permission and support to engage.

24. We know of independent academics on SAGE who, having signed the official secrets act, have feared saying something that is relevant to national security and getting into trouble. As a result they behave over-cautiously by not talking to journalists, their expertise is lost and the media is forced to rely on fewer (and sometimes poorer) experts.
25. There are often qualified scientists at the heart of the crisis who work at government-run or arms-length research institutions who have sufficient knowledge to speak to the media about background issues, but unless these experts are one of the handful of approved spokespeople and it is a 'priority message' then they are not allowed to – which leaves media and public without the benefits of their expertise.

Sharing information more widely

26. Another group of scientists not yet mentioned are those on the SMC database who are not on SAGE/Cobra or part of Government-run/arms-length institutions. These third party scientific experts recognise the importance of engaging with the media, but they may not have access to the most up-to-date information. It is better that they are given a voice than those who have no expertise, but it would be better still if they were given up-to-date information to help them when they speak to the media.
27. If these scientists don't speak out, even with more limited information, the media will still have to run with the story and will still have to find an independent voice, which means they will turn to campaign bodies, mavericks, charlatans or the scientific expertise of the person in the street.
28. The public will get most of their information about the crisis from the mass media. If they are not hearing from scientific experts then this is a missed opportunity. During the Fukushima crisis Former Education Minister Estelle Morris said that she learned "more about radiation from seeing scientists on Sky news on the hour every hour, than [she] ever learned in school", which was largely down to the third party experts who did media work, resulting in much more accurate coverage of the story in the UK than elsewhere, as highlighted by the 'nuclear bounce' which showed support for nuclear power was higher in the UK after the Fukushima disaster.

Recommendations

Freeing top experts

29. Chairs of SAGE and Cobra should explicitly permit and pro-actively support independent scientists appointed to SAGE and Cobra to do media work – if there is any information which should be avoided due to national security reasons that should be made clear to them at the time.
30. Remove confidentiality clauses for independent scientists appointed to SAGE unless justified by national security.
31. SAGE should include an independent scientific press officer as a member – they could focus on the key items that are allowed to be shared with the media and advise SAGE to think of the best way of communicating risk and advice.
32. Government-run and arms-length scientific bodies should enable more experts to do media work in a crisis – we are not asking for all staff to be allowed to comment, nor that they challenge the government's stance, simply that the number of spokespeople should be

increased and they should be encouraged to discuss the background issues with journalists and the SMC.

Disseminating information

33. SAGE should consider sharing information with third-party scientists who will inevitably be asked to comment via the media – The Department of Health did this during swine flu to great effect with Liam Donaldson’s briefings which were incredibly useful for the scientists we work with, and PHE have committed to sharing information in the future. The role of independent experts should not be underestimated during a crisis.
34. Be open and transparent wherever possible – During the swine flu pandemic former CSA John Beddington was advised to say there was a consensus in SAGE on the use of Tamiflu for pregnant women. We advised him to be honest about the difference of opinions but that a consensus was reached. At the SMC press briefing the journalists found that a perfectly reasonable response and that there was no story there. With the continued controversy around Tamiflu, if they had been told that there was no disagreement here this could have since developed into a much bigger story as a result. Trust in scientists is consistently high and this is in part because of their honesty and openness.

Further information

35. Evidence to House of Commons Science and Technology Select Committee inquiry into Science Communication – April 2016: <http://www.sciencemediacentre.org/wp-content/uploads/2016/05/Science-Media-Centre-Evidence-Science-Communication.pdf>
36. Evidence to Sense About Science – February 2016: PDF
37. Evidence to House of Commons Science and Technology Select Committee inquiry on science in emergencies: UK lessons from Ebola – September 2015: <http://www.sciencemediacentre.org/wp-content/uploads/2015/12/Written-evidence-submitted-by-the-Science-Media-Centre-EME0009.pdf>
38. Evidence to House of Commons Science and Technology Select Committee inquiry into Scientific Advice and Evidence in Emergencies – September 2010: <http://www.sciencemediacentre.org/wp-content/uploads/2010/09/Sci-advice-and-evidence-in-emergencies-Science-Media-Centre-Submission.pdf>
39. Evidence to Dame Deirdre Hine review on 2009 swine flu pandemic – May 2010: <http://www.sciencemediacentre.org/wp-content/uploads/2010/09/Sci-advice-and-evidence-in-emergencies-Science-Media-Centre-Submission.pdf>
40. “A chorus of expert voices serves science, the media and the public”, by Fiona Fox – May 2013: <http://www.sciencemediacentre.org/a-chorus-of-expert-voices-serves-science-the-media-and-the-public/>