

## Scientific Advice and Evidence in Emergencies for the Science and Technology Select Committee

Dear Friends,

The Science Media Centre was set up in 2002 in the aftermath of media frenzies on BSE, GM crops and MMR with the goal of supporting and encouraging more scientists to engage with the media more effectively in times of crisis and emergencies.

Over 8 years of responding to stories like Sudan 1, Polonium 210, SARS, foot and mouth disease, natural disasters, etc. we have built up a huge body of expertise in this area and hope that the following evidence will be useful to your inquiry into scientific advice and evidence in emergencies.

While on the whole the Science Media Centre works very positively with government at times like these, we feel there are some areas that could be improved. These are elaborated on over the next two pages but in summary they are:

1. **Use of credible third party independent experts** - government should see credible independent third party experts as an opportunity rather than a barrier to a 'single public health' message. The way to overcome the challenge of conflicting messages from experts is to ensure more and wider briefing of those experts.
2. **Never leave a vacuum** - the message scientists learned from the GM crisis in particular (and more recently from the UEA climate emails saga) is that if the best scientists refuse to comment, others less expert will take their place. It is critical that while the Government is formulating a unified response, the media has easy access to the most accurate evidence-based information - even when this is necessarily incomplete!
3. **Government advisers must be free to brief the media (and therefore the public) as well as the Government** - during previous crises some of the best independent scientists were quickly appointed to advise government by serving on SAGE (Scientific Advisory Group for Emergencies) committees. While some in government have assured the SMC that this does not disqualify these experts from briefing the media, that has not been made clear enough to those experts, many of whom have stopped speaking to journalists as a result of their appointment as an adviser. The SMC believes government must proactively encourage these scientists to continue briefing the media.
4. **Do not fear openness** - being open and honest about differences of opinion and scientific uncertainties is particularly scary in the midst of a media feeding frenzy but the SMC is convinced that the benefits of greater openness outweighs the risks. Almost everyone in the debate over 'climate-gate' believes that scientists should have been more open about the uncertainties in climate science – even if those would be have been seized on by critics.
5. **Risk communication** – governments have become better and better at this but the infamous 65,000 deaths projection during the swine flu crisis shows that we all need to continue to improve risk communication

We hope this evidence will be useful to your Inquiry and would be quite happy to appear before the Committee if that would be useful. We also attach two very short summaries of the nature of the SMC's involvement in swine flu and volcanic ash and would refer you also to the references to that role in the recent Hine Review of the H1N1 emergency

Yours faithfully,

Fiona Fox

**Note:**

The Science Media Centre ([www.sciencemediacentre.org](http://www.sciencemediacentre.org)) specialises in working with scientists and UK national journalists on the biggest and most controversial news stories. We work with over 2,500 scientists, 1,000 press officers, and journalists on every major press and broadcast outlet in the UK on topics ranging from animal research and the use of stem cells to train crashes and flooding. On H1N1 swine flu and the effects of volcanic ash alone we issued statements from over 120 scientists, organised over two hundred interviews and ran 6 press briefings. We also gave written and oral evidence to Dame Deirdre Hine's independent review of how the Government handled the pandemic.

In one interesting development, the Science Media Centre partnered with GO-Science and the Chief Scientific Adviser's office to produce a 'Glossary on swine flu' specifically for news journalists which was launched at a press briefing at the British Science Festival last year.

### **Points for consideration:**

During the swine flu pandemic, the CMO, DH and HPA handled the communications well. Weekly press briefings bringing in experts were welcomed by the journalists, who on the whole felt well briefed with information and access to the best experts. Daily updates from HPA and DH helped the Science Media Centre enormously in terms of basic facts on spread, etc.

The ash from the Icelandic volcano caused different problems with respect to the media as the story ranged from the territory of one official body to another and some engaged more than others. We organised interviews with scientists who could discuss volcanology, impact of ash on health, assessing risk to aeroplanes and meteorology.

### **Using Independent third party experts in midst of crisis**

1. In times of crisis evidence shows that people respond well to a single unified message and that is the ideal.
2. However, we operate in a 24-hour rolling news environment where journalists and the public are sceptical of official Government messages and will ALWAYS look to other views. There is a strong need for independent third party experts; when the press aren't given reputable experts, it doesn't stop them running the story, but instead they use less and less credible figures. The SMC co-ordinates many independent experts from Universities and agencies like the Wellcome Trust, MRC, etc.
3. We fear that DH and some official agencies can be wary about these independent voices and the risk that there might be conflicting expert advice. We understand that completely but feel that the reality of today's media climate is that there is a need for them.
4. There is also evidence that at times of crisis people seek out multiple sources. We feel that the Government should embrace the fact that authoritative voices are commenting outside the official response - even if some of the advice is conflicting. In fact, most of it is not.
5. We propose that, rather than worry about these independent experts briefing media, Government departments should organise briefings for independent third party experts to ensure that key spokespeople are well briefed. We understand that the Ministry of Defence already does this successfully.
6. The public dismissal of Prof David Nutt served to make some scientists wary of engaging with Government. The roles of independent advisors should therefore be protected and the Principles on Scientific Advice to Government should be adhered to.

### **Filling the vacuum**

1. Leaving a vacuum is always dangerous and can easily be filled by less credible experts. During the swine flu pandemic, whilst the journalists were delighted with the regular weekly briefings by the CMO, they did rely on the SMC to fill the huge vacuum in between the briefings. During

the gaps where official sources were not responding to media enquiries, the SMC ran background briefings, issued fact sheets and supplied experts for back to back interviews. We think the combination of official briefings backed up by proactive expert comment coming out of the SMC helped the overall communication of evidence based messages.

### **Don't remove independent scientists from public debate by asking them to become Government advisers**

1. When SAGE was set up for pandemic flu, several of our top scientists felt unable to brief the media while also advising Government.
2. These are the top experts in the country and are needed to advise Government but also needed to advise and inform public opinion. We feel that they could be asked to keep discussions at SAGE confidential while still being allowed and indeed encouraged to brief the media and inform the public in their general areas of expertise.
3. We lobbied for a change to this with SAGE (Volcanic Ash) and would like to see this extended to all SAGE committees.
4. Some scientists sitting on these committees felt intimidated by being warned about the Official Secrets Act or asked to sign Confidentiality Clauses, which could serve not only to dissuade them from engaging with the media, but also from giving advice to Government in future.

### **More transparency and openness**

1. We think there could be more openness about the nature of discussions within SAGE. Questions, for example, about whether to mass vaccinate or hand out anti-virals more widely were widely debated amongst scientific and medical experts and trying to suggest that there was absolute agreement led to suspicions amongst journalists.
2. We were especially disappointed when a press briefing on vaccine safety with David Salisbury was cancelled at the 11<sup>th</sup> hour during the swine flu pandemic, despite huge interest from journalists. We fear that sometimes there is too much caution from government media advisers when actually the specialist reporters are almost all responsible and careful.

### **Risk communication**

1. There was much discussion about the 65,000 deaths figure issued by the CMO after seeing Imperial models of the spread of swine flu. It is our strongly held view that the CMO had to give the media this figure as if he had attempted to hide it in any way it would have been seized upon. However, the SMC has successfully run many, many briefings where a range of risk is communicated and we believe that it is possible to emphasise the caveats and appeal to the responsible journalists not to emphasise the upper range without heavily qualifying.

2. All scientists need to get much better at saying 'I don't know' and admitting that there is often huge uncertainty and differences of opinion about the actual level of risk. Attempting to reassure the public and journalists by asserting a level of uncertainty and agreement has backfired badly in the case of climate change and, to some extent, in volcanic ash and swine flu. The truth is that in the midst of a crisis neither the government nor experts may know, nor could possibly know, exactly how severe a problem may be. There should be honest and open discussion about any levels of uncertainty.

### **Summary of Recommendations**

1. Government should establish a system of regular briefing of third-party experts who are likely to do media work in the midst of an emergency – this could operate through the Science Media Centre.
2. Government should proactively encourage independent scientists to continue briefing journalists (and therefore informing the public) after they have been appointed to advise government on groups like SAGE.
3. The Officials Secrets Act and Confidentiality Clauses should not be used for independent experts advising Government apart from in extreme circumstances where national security is at stake – experts trusted enough to advise government should be trusted to keep some information confidential where appropriate.
4. Governments should be braver about being more open about the scientific advice they are receiving – even when this is conflicting or uncertain. An ever-more sophisticated public can cope with uncertainty if it is communicated effectively.