Scientific Advisory Group for Emergencies - Ebola

Summary Minute of 1st Meeting
16 October 2014
Boardroom, Department of Health, Richmond House, London

List of attendees

Chairs

Sally Davies	CMO
Mark Walport	GCSA

Attending

Suk Athwal	DCLG (via telephone)
Paul Cosford	PHE
John Edmunds	LSHTM
Peter Grove	Department of Health
Simon Hay	University of Oxford
Mike Jacobs	Royal Free
Anne Johnson	UCL
Matt Keeling	University of Warwick (via telephone)
David Lalloo	Liverpool School of Tropical Medicine
Melissa Leach	Institute of Development Studies
Dilys Morgan	PHE
Paul Moss	University of Birmingham
Mair Powell	MHRA
Peter Piot	LSHTM
David Salisbury	Chatham House
John Watson	Department of Health
Chris Whitty	DFID
Jimmy Whitworth	Wellcome Trust

Officials

Alex McLaughlin	Department of Health
Jasdeep Sandhu	DFID
Ailsa Wight	Department of Health

Secretariat

Colin Armstrong	GO-Science
Phil Green	Wellcome Trust
Ruth Parry	Department of Health
Andy Ryan	GO-Science
Elizabeth Surkovic	GO-Science
Chloe Watson	Wellcome Trust

ACTIONS

1. **CMO and GCSA** to take action to ensure that relevant data was available for analysis as appropriate.

2. **Ebola Modelling Group** to share data with members of the group.

3. **Ebola Modelling Group** to revise the consensus statement so that it can be provided to this afternoon's COBR.

4. **Ebola Modelling Group** to provide detail on the level of uncertainty around the forecasts.

5. **Ebola Modelling Group** to create a range of possible scenarios for the future evolution of the outbreak.

6. **Neil Ferguson** to circulate update on the situation in Guinea.

7. **SAGE Secretariat** to set up a Vaccination SAGE sub-group to revise the vaccination papers and further explore the science and implementation behind the vaccination options.

8. **DH** to set up a task force including vaccine producers and vaccine implementation officials.

9. **Chris Whitty and Melissa Leach** to set up a Social Science SAGE sub-group.

10. **DH** to set up a Diagnostic SAGE sub-group.

11. **Wellcome Trust** to provide a one-pager on genetic sequencing work.

AGENDA ITEM 1: WELCOME

GCSA welcomed participants to the first meeting of the Scientific Advisory Group for Emergencies (SAGE). Attendees were informed that they should continue to speak to the media in their capacity as experts but content from SAGE meetings was to be treated as confidential.

AGENDA ITEM 2: SITUATION REPORT

Department of Health

- The number of cases of Ebola Virus Disease (EVD) was expected to reach 9000 during week commencing 20 October, with approximately 4500 deaths.
- The UK National Preparedness Exercise carried out on 11 October had gone well.
- Screening had been introduced at Heathrow Airport and would be implemented at Gatwick Airport and Eurostar Terminals in the week commencing 20 October. Discussions had been held regarding the implementation of screening in Birmingham and Manchester airports.
- 750 military personnel had been deployed to West Africa.

Public Health England

- Public Health England (PHE) explained that they had been monitoring the situation carefully and had been working to ensure that systems were ready for the first UK case. PHE had also undertaken a risk assessment of imported cases and developed guidance for humanitarian aid workers.
- Feedback had been received suggesting that exit screening in Sierra Leone, Liberia and Guinea was relatively robust.

AGENDA ITEM 3: UPDATE FROM SIERRA LEONE

The UK strategy, to bring the Reproduction Number below 1 and to protect healthcare workers, provided a clear goal. SAGE agreed that ensuring safe burials, minimising hospital transmissions, and reducing transmission in the community would help to achieve this.

It was noted that reducing transmission in the community would be difficult but could be achieved through the use of small community care units to isolate suspected Ebola cases before transfer to treatment centres. A number of prototype care units had been built in Sierra Leone, some of which were tented facilities. It was stated that this intervention was not perfect and would not prevent transmission completely but it was considered preferable to other options available. SAGE noted that these centres were unlikely to have an impact on transmission for at least six weeks.

There had been a reduction in transmission in some rural areas of Sierra Leone but the situation was prone to change rapidly, as had been seen in Kenema, where two funerals resulted in an additional 68 infected individuals.

With regard to safe burials there was a need to balance epidemiological needs with social and cultural needs, acknowledging that the cultural side was more difficult to address. Community trainers were needed to help develop sympathetic safer burial rituals.

AGENDA ITEM 4: FORECASTING

The outbreaks were continuing to grow exponentially but with geographic variation across the three countries worst affected by the epidemic. The doubling time was estimated to be approximately 30 days and without intervention the epidemic could be expected to continue to grow at the same rate until there were major societal changes. Forecasting was difficult due to a lack of understanding around the routes of transmission. In the worst case scenario, the roll out of treatment beds would need to match or exceed the exponential rise of the outbreak.

More scenario work and greater confidence in the data was needed in order to aid policy-makers. The Ebola modelling group agreed to provide detail on the level of uncertainty around forecasts and to create a range of scenarios on the possible evolution of the outbreak.

It was noted that further action was needed to ensure that all relevant data was available for analysis as appropriate. CMO and GCSA agreed to take action to ensure data was widely available.

AGENDA ITEM 5: VACCINATION

The first release of an Ebola vaccine was expected on 28 November 2014. SAGE discussed how the limited number of doses could be used in Sierra Leone. The following points were made in discussion:

- All of the candidate vaccines have the potential to induce fever – an important consideration in an Ebola setting.

- Further information was needed on the likely duration of protection of the vaccine and the potential need for a booster vaccination. If a boost was required, information on the minimum interval necessary between a prime and the boost should be gathered.

- Ring vaccination could be the most efficient strategy unless the number of cases continued to grow exponentially, in which case it was unlikely to be feasible.

- Social science input would be vital for discussions around trial design and strategies for ring vaccination.

- The number of front-line staff in the three affected countries was estimated to be 24,000. In view of the likely available vaccine supply, it was considered possible to vaccinate most front line staff by the end of January 2015.

- The low storage temperature could result in transportation issues.

A number of areas for further study were highlighted, including whether pregnancy was a risk group for vaccination; whether there was a case for vaccinating cohorts of workers in West African countries not currently affected by the epidemic; and the possibility of post-exposure vaccination.

The Department of Health highlighted that they were working to ensure all interventions were considered and were continuing discussions with the National Blood Transfusion Service regarding a blood apheresis machine for use in Sierra Leone. In addition, a taskforce would be established bringing together vaccine producers and vaccine implementation officials.

AGENDA ITEM 6: WHAT MORE COULD BE DONE?

What was the risk to the UK?

SAGE agreed that the UK could expect a handful of cases (0-5) if the outbreak in West Africa was contained, but that figure could rise if the cases in West Africa continued to double. The likely number of cases was also dependent on travel volumes between West Africa and the UK. There were also a number of different risks to the UK associated with numbers of imported cases, secondary cases, and community transmission. To date, there had been 21 cases of EVD treated in developed countries, four of which had led to onward transmission.

What other issues should SAGE consider?

Concerns were raised about the possibility that viral sequence data was not available. The Wellcome Trust agreed to produce a short paper for discussion at the next meeting on potential solutions.

It was suggested that greater clarity over the care available in the UK compared to Kerry Town was needed in order to fully inform healthcare workers in the UK who planned to travel to Sierra Leone to volunteer.

Several additional areas for further consideration were highlighted, including:

- Were the correct communication strategies being employed?
- Were survivors being encouraged to be involved in the response?
- Could other countries be better supported to bring possible outbreaks under control?
- The potential shortage in supply of Personal Protective Equipment (PPE).

It was agreed that in addition to the modelling group that subgroups on diagnostics, social science, PPE and Vaccination should be established.

AGENDA ITEM 7: AOB

The date of the next meeting was proposed as Wednesday 29 October.