Minutes of the fifth meeting of NERVTAG – 14 June 2017

Time	10:30 – 16:00
Date and location	14 June 2017 The Old Library, Richmond House
In attendance	Jonathan Van Tam (Chair), Fran Parry-Ford (Secretariat), Peri Scott (Administrative Support), Neil Ferguson, Wendy Barclay, Wei Shen Lim, Ben Killingley, Matthew Donati, Calum Semple, John Edmunds, Jim McMenamin (via teleconference). *DH Observers:* John Watson, Kevin Dodds, Peter Grove. *PHE Observers:* Gavin Dabrera, Maria Zambon (via teleconference).
Apologies	Peter Openshaw, Peter Horby, Andrew Hayward, Chloe Sellwood, Bob Winter.

1. Introductions and welcome

The Chair welcomed members and observers to the meeting and thanked them for their attendance.

2. Conflicts of interest

The chair reminded members of the importance of declaring any new conflicts of interest, and recording these via the secretariat. JVT and CS declared additional interests. JVT withdrew some now time-expired interests.

3. Secretariat Report

FPF presented the secretariat report. JVT highlighted the importance of member appraisals which will continue over the summer. PG gave an update from SPI-M which continues to meet three times a year. The recent work plan has focused on refining the data that will be available to the real time modelling team. The future work plan will include a review of the evidence base for the model assumptions. A new chair will be appointed shortly. JVT confirmed that once the new Chair of SPI-M

was appointed, they would be invited to attend NERVTAG and talk to members about the work plan and interactions between NERVTAG and SPI-M.

Action 5.1: Secretariat to invite the new chair of SPI-M to the next meeting of NERVTAG.

4. Minutes of the last meeting, actions and matters arising

The Chair reminded members that the minutes of the last meeting were signed off via e-mail and are now published on the website. Any issues should be reported to the secretariat.

Review of actions from the meeting held on 2 December 2017

Action	**Organisation /individual actioned**	
Action 4.1: Secretariat to forward job description for behavioural scientist to members once CMO has given her approval.	Secretariat	**COMPLETE** The submission to CMO for permission to advertise this post has been approved. The DH appointments team will prepare the advert with the aim of advertising the role in September 2017.
Action 4.2: Secretariat to request that this report is shared with members at the next meeting (June 2017).	Secretariat	**COMPLETE** This paper was circulated to members. JW presented the paper (see matter arising).
Action 4.3: JVT&RP to put together a one-page paper describing NERVTAG's comments on NPFS coming out of the discussions at today's meeting.	Chair & Secretariat	**COMPLETE** The Chair presented the paper to members. Members agreed that it was a fair and accurate representation of the conversations at the meeting.
Action 4.4: JVT to report back to DH that it has not proved to be possible to set up this study without funding.	Chair	**COMPLETE** The Chair confirmed that this has been done, but there have been further developments (see matters arising).
Action 4.5: JM to make enquiries about the feasibility of a study of PPE use in an ITU in Scotland.	Jim McMenamin	**COMPLETE** JM confirmed that there is interest in participating in this study. MU will ensure that JM is made aware when the tender goes out.

Matters Arising

Action 4.1: JW presented the paper which is a brief summary of the DH sponsored workshop on antivirals. The purpose of the expert workshop was to see what could usefully be taken from the AMS recommendations and to advise DH on the practical questions, whether we are capable of answering them, and which were the most important. This would help DH decide on strategy and direction. The workshop highlighted the difficulties of conducting trials in specific patient groups including patients who are severely ill in hospital. However there are some potential opportunities using adaptive design studies such as the ALIC4E trial being conducted by Chris Butler at Oxford. There was enthusiasm from attendees at the workshop about research on the use of antivirals in children in the community, and use in a public health context (e.g. care homes). NERVTAG members discussed the paper, including the potential use of adaptive design studies, and the acceptability of studies to patients and clinicians. Members felt it would be useful to invite Chris Butler to speak to NERVTAG about the ALIC4E trial.

Action 5.2: Chair to invite Chris Butler to attend a meeting of NERVTAG and present on his antivirals work.

Action 4.4: MU confirmed that PHE is currently putting together a business case to go out to tender for a time and motion study based in an ITU. BK confirmed that he knew of contacts who would be interested in participating if there was funding available. Members discussed the HSE recommendations that respirators are changed every hour. It was agreed that it would be useful to include some measure of duration of used of respirators within the study.

Action 4.5: JM confirmed he knew of Scottish colleagues who were very keen to participate in the study. A short life working group has been established in Scotland to run a study looking at the use of powered hoods in ITUs. It might be possible to combine this work with a study looking at respirator use.

5) PHE Risk Assessments

GD presented the risk assessments on H7N9, H5N1, H5N6, H5N8 and MERS-CoV. The members agreed that there was no evidence to justify making a change to the current risk assessments for any of these viruses. However, members expressed concern regarding the increased activity and geographical spread of H7N9 in China during the most recent 5th wave, as well as concerns about observations of antiviral resistance and the emergence of a highly pathogenic strain in poultry. Given the increased concern, NERVTAG will be requesting further epidemic intelligence from PHE, and will review the risk assessment in three months, rather than waiting for the

next meeting of NERVTAG in late November. This will most likely be achieved via teleconference.

Action 5.3: Secretariat to arrange a teleconference in approximately three months.

Action 5.4: Secretariat to link with DH to expedite the appointment of Ian Brown on to NERVTAG, so that members will benefit on his expertise on the epidemiology and the virology of the virus in birds to further inform the risk assessment.

Action 5.5: Chair to request that NERVTAG members who are visiting China or meeting with H7N9 experts provide feedback and input to the intelligence gathering process following these visits.

5b. Risk Assessment Tool

GD presented the current iteration of the risk assessment tool which incorporates the feedback given by members at the last meeting, and the proposed format/layout of future reports. It is envisaged that the tool will be used for future meetings of NERVTAG, but that the descriptive risk assessments will continue to be used to complement the tool. Members agreed that the tool would be a useful addition to the NERVTAG risk assessment process, however several members raised specific issues with the current version of the tool. The Chair suggested that these issues were addressed outside of the meeting, and that the tool began to be used from the next meeting on a trial basis.

Action 5.6: GD to communicate with the members who noted issues with the tool, to address the concerns and make the necessary changes, specifically NF, MD, WSL and JE.

6. Update on the pandemic vaccine optimisation work

GD updated the group on the progress of this work. PHE has been tasked by DH to undertake work to ensure that in the event of a future pandemic, that a safe and effective vaccine is available as rapidly as possible, and is delivered in volume to the UK population with optimal strategy to mitigate pandemic impact. This work is being undertaken via three complementary work streams.

Work stream one is focused on public health pandemic vaccine science, and is led by Richard Pebody. This work stream will address the areas of expertise in public health vaccine science and associated structures are required both nationally and internationally (including WHO and ECDC). This work stream incorporates virological and public health risk assessment of new emerging virus, clinical trials to improve understanding for future use, access to expertise in epidemiology and virology, behavioural science and the role of advanced statistics and modelling

Work stream two focuses on new and emerging pandemic vaccine technologies and is led by Maria Zambon. It aims to review the current and near future vaccine technologies that are available nationally and internationally, which might enable the more timely availability of pandemic vaccines at a population scale. This work stream may also consider technologies with a 5-10 year lead time, and potential investment opportunities. As part of this work stream there will be liaison with the industry to develop a complete picture of realistic products that may be in the pipeline.

Work stream three is around procurement and licensing and regulatory issues, and is led by the PHE Countermeasures team. It will address the factors that need to be considered in future PSV procurement to ensure that the UK PSV supply is resilient and timely.

There will be an interim report on progress to the Pandemic Influenza Preparedness Board in September 2017, with final outputs expected around December 2017. The final report will go to the Chairs of NERVTAG and JCVI, for sign-off.

7. Exercise Cygnus: Lessons learned

Ruth Milton joined the meeting via teleconference to present the item on Exercise Cygnus. Members received copies of an extract of the full report that focused on the lessons learned during the exercise. Exercise Cygnus was a Tier One command post exercise involving national, regional and local government player, held over three days in October 2016. The aim of the exercise was to assess the response to a pandemic of influenza. Feedback and lessons learned were established via a formal process of feedback from players. The following four key issues were identified:

1. Consideration of the development of a Pandemic Influenza Concept of Operations to improve co-ordination between the complex network of partners involved in a pandemic influenza response, to better align individual organisations response plans, and to provide an overview of the entire response.

2. Advanced planning for legislative easements which would come into effect during a pandemic. This could provide greater flexibility during a pandemic and an improved response.

3. The need for a better understanding of the public reaction to a reasonable worst case pandemic. Exercise play was based on assumptions of public reaction which were generally unsubstantiated. More research in this area could assist the development of emergency plans, and communication strategies.

4. The need to strengthen the surge capability and capacity in operational resources in certain areas. If demand outstrips local supply, there will be a need to scale up the response, for example to regional level. This was particularly true for excess deaths, social care and the NHS.

JVT commented that the lessons learned were primarily operational issues, and added that NERVTAG would be happy to provide advice on any issues of clinical or scientific concerns should these be raised in the future.

RM agreed that the key issues were operational, and that one further issue that was not specifically referred to in the extract provided was around population triage and the moral and ethical issues associated with that. CS commented that this would be an important point to follow-up on as DH through NIHR has invested in sleeping contracts for studies focused on population triage. Members briefly discussed the benefits of legislative easing, primarily around research but also possibly in the use of medications unlicensed in the UK. MU reported that during Exercise Cygnus, the antibiotic stockpile was released however the current antibiotic guidance has not been updated in line with the changes to the stockpile. GD replied that some of the guidelines are currently being updated by PHE. JVT requested GD to ensure that NERVTAG is sighted on the development of these documents.

***Action 5.7*:** JVT to write to DH to re-express concerns that NERVTAG has made new recommendations regarding the composition of pandemic stockpiles of antivirals, antibiotics and PPE, but the current clinical management guidance has not been updated to reflect this.

8) Discussion on the eye protection aspects of the NERVTAG Sub-committee advice on the pandemic influenza Facemasks and Respirators stockpile

In early 2016, the NERVTAG sub-committee on facemasks and respirators made formal recommendations to DH on the appropriateness of the national PPE stockpile for pandemic influenza. Amongst the new recommendations was the advice to provide appropriate eye protection to health care workers due to the theoretical possibility (backed up by limited indirect evidence) of a risk of infection (of unknown magnitude) via the ocular route. PG explained that the procurement team at PHE has now obtained new information about the very large incremental cost of adding in eye protection. A subsequent internal DH health economic assessment has revealed that following these recommendations would substantially increase the cost of the PPE component of the pandemic stockpile four- to six-fold, with a very low likelihood of cost-benefit based on standard thresholds. DH would therefore like to ask NERVTAG to clarify the detail of their advice in light of the costings, and reconsider its recommendations against the strength of the scientific evidence of the ocular

route as a source of infection, and the likely incremental cost-recommendations, based on the absolute and opportunity costs involved.

JVT suggested that this request would be most effectively handled via the NERVTAG facemasks and respirators sub-committee chaired by BK, which could be convened on a virtual basis. A response is needed by the end of August, in time for a procurement window. JVT requested that DH send NERVTAG a specific request outlining the issues.

***Action 5.8*:** DH to send a note to the Chair and Secretariat with a statement of the problem, and a request for NERVTAG advice.

***Action 5.9*:** Secretariat to liaise with JVT and BK to convene a virtual meeting of the sub-committee once the note is received from DH.

9) AOB

a) Alternatives to co-amoxiclav – NERVTAG subcommittee advice

MU explained the backround to this issue. Due to a national antibiotic shortage, part of the pandemic stockpile of IV co-amoxiclav for adult use has been mobilised. Consideration towards a temporary alternative antibiotic for stockpiling purposes was requested. This request was communicated to the Chair of the NERVTAG sub-committee on antibiotics (WSL) in advance of the meeting. The advice of the chair ia as follows:

- The choice of an alternative antibiotic was considered alongside advice obtained from the PHE National Infections Service, via Dr Meera Chand.
- IV cefuroxime 750 mg tds is considered a suitable alternative to IV co-amoxiclav for pandemic stockpiling purposes.
- However, the advice is given with the following caveats:
    a. Cefuroxime is not the antibiotic specified in the existing Recommendations previously developed by the Antibiotic sub-committee. It should therefore only be considered a **temporary alternative** until adequate levels of co-amoxiclav can be requisitioned according to those Recommendations.
    b. Cefuroxime is used as the temporary alternative for only a **small proportion** of the co-amoxiclav stockpile i.e. it should not replace co-amoxiclav entirely, and more than is absolutely necessary.

b) Supranational update: Nagoya update/PIP framework and genetic sequencing/seasonal viruses/pandemic vaccine triggers

JW updated members on pandemic influenza work taking place at an international level.

- The Nagoya protocol is now coming in to effect. There is potential for the implementation of the protocol to impact on the ability to share influenza viruses around the world. WHO has agreed to enter into discussions about this, and look into the development of criteria for an international instrument that is exempt from Nagoya, to help the exchange of potential pandemic influenza viruses for research purposes.
- The WHO pandemic preparedness framework has recently been reviewed, and the report of the review was discussed by the World Health Assembly. The report made several recommendations that would continue to facilitate the sharing of influenza viruses and data at an international level.
- WHO had previously stated that they would not hold the responsibility for triggering the switch to pandemic specific vaccine production in the event of a pandemic, instead leaving it to individual countries to make this decision. This was widely viewed as impractical due to the globalised nature of pandemic influenza vaccine production. WHO has now recognised they need to take a co-ordinating role, and that there needs to be an international process for this. A report on this issue is expected to be published.

Action 5.10: JW to send the report (once available) to the secretariat for circulation to members.

10) Next Meeting

JVT thanked members and observers for their contributions, and confirmed that the next meeting is scheduled for Friday 24 November 2017, with an interim meeting by short teleconference in September to re-visit the H7N9 risk assessment.