Health Protection Agency
Emergency Response Division

FINAL REPORT on

EXERCISE SHIPSHAPE

Test of response of the health community in the event of a SARS (Severe Acute Respiratory Syndrome) outbreak in South West England/Wales

Friday 6th June
Ramada Plaza Bristol

EXECUTIVE SUMMARY

1. On 6th June 2003, the Health Protection Agency (HPA) held a one day exercise (Shipshape) to explore the contingency plan for SARS (Severe Acute Respiratory Syndrome) to ascertain areas in which amendments might be necessary.

2. **Syndicates**
Local Bristol (Primary Care Trusts)
Local Wales (Newport/Gwent (Primary Care Trusts)
Regional Government of the South West (Strategic Health Authorities)
Wales Public Health (Strategic Health Authorities (Wales))
Department of Health
National SARS Team (CDSC Colindale)
HPA National

Observers/Journalist

Exercise Control

OBJECTIVES

1. To explore the capabilities of local healthcare systems in coping with an increasing number of SARS cases.

2. To explore control of infection guidelines, including isolation procedures and communication protocols.

3. To assess regional support to a local event.

4. To explore contact tracing arrangements and co-ordination of data communication.

5. To identify resource requirements.

6. To review command and control structures, including an understanding of roles and responsibilities.

7. To explore HPA co-ordination centrally.

8. To identify support functions that will be required, their implementation and delivery.

9. To confirm the Department of Health (DH) role and the responsibilities of other Government Departments

10. To identify the implications for public order.

11. To explore the resources of SARS control teams and other players to deal with requests for information from the media.

EXERCISE SHIPSHAPE

GENERAL COMMENTS

The exercise provided an excellent opportunity to explore the existing HPA contingency plan for SARS.

The exercise was a genuine success. As with all reports, there is a concentration on lessons learned. However, many positive points were revealed.

- The performance of the South West local team was excellent, with good communication and co-ordination.
- The co-ordination and communication of the Welsh teams was also extremely good.
- The national SARS team's use of a virtual teleconference was innovative and effective.
- The concept of an observer programme was a success, which may be copied by the other agencies observing in their exercises.
- The players regarded the exercise as a positive experience and entered into the spirit of the event. There were many comments verbally about how the health community needs to do more exercising as a learning and development tool.

The exercise also highlighted some fundamental issues, such as the different approaches of the Welsh and South West local teams, resources (staff, equipment and facilities), the demands of the media and the role of the HPA itself.

Both positive points and lessons learned are developed further in the report.

The post-exercise notes from each syndicate are appended in Annex 1.

General comments from delegates are appended in Annex 2.

As recommended in the report on Exercise Red Scar, a greater number of observers from a wider range of agencies and organisations was invited – their comments are appended in Annex 3.

DID WE MEET OUR OBJECTIVES?

This information is gathered from the observations of all the syndicates after the exercise. The action points derived from it follow after the objectives.

1. **To explore the capabilities of local healthcare systems in coping with an increasing number of SARS cases.**

- There was a need to think about safety procedures and places for assessing patients.
- Staffing resources would be problematical
- Should one hospital in the area be designated an infectious diseases receiving hospital? Should it be geared up now?
- There may not be adequate ITU bed capacity and protective equipment
- Decontamination advice will be given by hospital infection control teams who should have a policy in place – there is a trust-wide policy in place (Wales)
- There are health & safety issues around air conditioning units

2. **To explore control of infection guidelines, including isolation procedures and communication protocols.**

- Decontamination protocols (e.g.WHO/CDC) and all related issues to be dealt with subsequently by a taskforce
- Communications protocols apparently already exist between PCTs and SHAs, but were not readily apparent
- Guidelines may need revision, in light of exercise

3. **To assess regional support to a local event.**

- Standard Operating Procedures (SOPs) need defining
- Messages need co-ordinating at a local, regional and national level
- Is the SHA empowered adequately from the National level?

4. **To explore contact tracing arrangements and co-ordination of data communication**.

- In a non-exercise situation, contact tracing would be very time and labour intensive. Who would carry this out?
- Consider strengthening staff training to cover contact tracing.
- Who holds the operational data? There needs to be an integrated national database at Colindale to provide information for WHO, SW Epidemiology and CDSC

5. **To identify resource requirements.**

- Does NHS have capacity?
- There is a need for surge capacity and relief arrangements
- Lack of personal protective equipment (in this context includes gloves, gowns and TB-quality facemasks).
- Clarify PPE stocks and ensure safe storage
- Look at emergency department capacity
- Look at ICU capacity

6. **To review command and control structures, including an understanding of roles and responsibilities.**

- Lines of responsibilities of Government Office/HPA/SHA are blurred and need clarification
- There is lack of knowledge of and clarity around the role of the HPA
- Lines of responsibility between DH and the HPA should be clarified - lack of knowledge of roles within the HPA divisions
- Bronze/Silver/Gold designation is weak and needs strengthening
- There needs to be a cross-border liaison (SW/Wales) strategy.
- Local on-call rotas need streamlining.

7. To explore HPA co-ordination centrally.

- The National Plan does not at present recognise central HPA. It is focused on CDSC, as it has an operational control role. HPA Central has a strategic role, linking to DH and Government and is a forward-planning resource
- HPA has not defined its communications role

8. To identify support functions that will be required, their implementation and delivery.

- NHS Direct briefing is national and should have local input
- NHS algorithms need looking at, particularly at the triage level
- Is there a dormant contract between DH and PASA for equipment (masks, gowns, boots etc.)?

9. To confirm the Department of Health (DH) role and the responsibilities of other Government Departments

- DH is in the lead when largely a health issue – Cabinet Office takes over if it is a major national event.
- Advice will be provided by DH on where to get advice and who has responsibility
- Were the Government Office of the South West and the SHA unified? A single point of contact and approach are required.
- Who could speak for the UK and include Wales?

10. To identify the implications for public order.

- How do we step up control measures and the use of quarantine?
- There needs to be more openness with the public about possible quarantine and more pre-planning on public order control
- Guidelines need to be put in place at local level

11. To explore the resources of SARS control teams and other players to deal with requests for information from the media.

- There was a lack of co-ordination of messages because teams did not talk to each other
- Lines should be developed and co-ordinated after all agencies have consulted together and a course of action confirmed
- Communications should be cleared up and down the line
- There was some evidence of a lack of expertise in managing the media, rather than being driven by it

ACTION POINTS

Health Protection Agency

- Work on clarifying its role in relation to Primary Care Trusts, Strategic Health Authorities and the Department of Health.
- Re-examine the SARS contingency plan – some of the levels are too complicated and advice needs to be consistent across the UK. It needs to reflect better risk assessment.
- Explore how best to produce 'sitreps' during an outbreak
- Set up a workshop to look at decontamination protocols

Bristol Local/PCT

- Build plans for a long-term sustainable response to an outbreak
- Start staff awareness training
- Liaise with Police over public order guidelines
- Think about Health and Safety procedures
- Look at the contact tracing resource
- Look at bed capacity and staffing levels

South West Regional

- Revise strategy to include cross-border liaison
- Streamline on-call rotas
- Work out clear lines of demarcation
- Find out about contract with DH and PASA
- Write care homes strategy
- Work out reporting lines for data collection

Wales Local and Regional

- Look at NHS Direct algorithms, particularly at triage levels
- Examine decontamination and disinfection problems

CDSC Colindale National SARS Team

- Possibly clarify some aspects of case definitions that do not work well
- Look at the control of case reporting

THE BIG ISSUE – COMMUNICATION, COMMUNICATION, COMMUNICATION

Over 85% of those delegates who commented on the exercise mentioned the need for effective communications, top down, bottom up and horizontal, both external and internal. Hospital staff and patients would need to be kept in the loop, in the event of a hospital closure. Operational communications between departments within the NHS, HPA and DH showed signs of weakness.

Lines also need to be agreed for the media and these need to be cleared, again up and down the line. It is also essential to manage media interest and not be driven by it.

While, ideally, there should always be a lead spokesperson for each area, it would be useful to nominate several people who could also be called upon. Media training needs to be provided, so that they are confident in a crisis.

It is clear that communications need to be woven into future exercises more systematically and there is a pressing need for an exercise to be run that will specifically test communications.

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Annexes:
1 **Post-exercise feedback from syndicates**
2 **Comments from delegates**
3 **Comments from observers**

ANNEX 1

Post-exercise feedback from syndicates

Bristol Local

- Need to be more open with the public re possible quarantine
- More pre-planning on public order control
- Guidelines on ground for public order for quarantine
- Hospital sector: want to think about safety procedures and places for assessing patients
- Staff training on awareness, protective equipment, bed capacity. Even a small number of cases will put pressure on resources.
- Staffing – a huge issue in the hospital and community. How to protect staff from SARS, keep staff coming to work?
- Designation of hospital – do we identify one hospital as an infectious diseases receiving hospital? Should we gear up now?
- Need negative pressure isolation facilities – role of regional resilience.
- Consistency of advice – what are the triggers for a UK-wide response? What about Scotland and NI/Eire cross-borders? Pre-planning required for a sustainable response long term.

PCT/Public Health Community

- Staff issue is critical – the contact tracing will stretch capabilities enormously
- Ambulances and protective equipment
- Link with NHS Direct – PCT ambulance service runs NHS Direct locally. Monitoring call levels and modifying advice. Should people go to hospital or not?
- The HPA hasn't defined its communications role. Best done with local teams.
- Communications with staff and public about no elective or emergency work
- How does communications work with different organisations and levels?
- Levels 1-4 of the Plan are too complicated
- Were the Government Office of the South West and the SHA unified? A single point of contact and approach are required
- Did we communicate enough with Wales?
- Not enough feedback from the top, but do we want a lot of direction from the top? What is the national approach to protective equipment and lines to take?
- ITU bed capacity is an issue
- There need to be clear guidelines on what PPE to wear. Negative pressure isolation is required.

South West Regional

- There is no cross-border liaison strategy. Information from Bristol and Wales took a long time to come together. Strategy needs to be revised. Local on-call rotas need to be streamlined and shared – who is on call? Mutual support is required.
- Training needs: UK emphasis, NOT Regional. Strategy is set at National level and should be reflected in all planning
- Media interviews – we were isolated from reality. There should be a monitor in each syndicate room
- Bronze/Silver/Gold designation is weak and needs strengthening.
- Maintain lines of communication and keep everyone in the loop. Stats were missing
- Clarity is needed around who does what within each part. Is the SHA empowered by the top. Clear lines of demarcation will avoid mixed messages
- There should be a national response plan that everyone should sign up to
- The JHEC (Joint Health Emergency Cell) needs to know onward lines of communication
- Confusion caused by Wales closing and SW not closing hospitals. This looked bad in the media. There should be a cross-border strategy.
- NHS Direct briefing is national, when there should be local input
- The equipment (masks, gowns, boots etc) turnaround was six hours. Is this realistic? Is there a dormant contract between DH and PASA SW Regional level needs to know about?
- The Plan relies on confirmed, not probable/possible cases
- The Plan needs to reflect better risk assessment
- There is no care homes strategy. The SHA wishes to write one.
- Reporting lines for data collection – there should be structures in place to know immediately, rather than ring round.

Wales local (merged local and regional teams)

- Decontamination and disinfection problems – disease is prevented at the hospital door
- Who holds the operational data? Integrated national database at Colindale with the day's tally, to provide information for WHO, SW epidemiology and CDSC
- NHS Direct algorithms need looking at, particularly at the triage level
- Hard to take the temperatures of large numbers of people – nobody has thermometers these days.

HPA (CDSC Colindale National SARS team)

- Problems with case definitions, which were created by the WHO in a Hong Kong context. Some aspects don't work well. Patients can remain probable/suspected for a week or more
- Reporting of cases fell apart in the exercise. It is necessary to report and designate cases quickly. We must control the big media demand

- Message needs co-ordinating at a national, regional and local level
- Not sure what we could reasonably say or ask for. Who could speak for the UK and include Wales?
- How to step up control measures and the use of quarantine.
- National operational co-ordination – lots of sweat at local levels. National people need information and to be able to pull strands together. There should be a national teleconference on a regular basis to avoid varying approaches.

Department of Health

- Unfortunately all from the same policy unit. There was no communications person involved, or NHS operational staff. Lack of knowledge of roles within HPA divisions.
- Consistent messages are important
- NHS Direct needs algorithms.

HPA Central

- National Plan doesn't recognise central HPA. It is focused on CDSC, which has an operational control role. HPA Central has a strategic role – links to DH and Government generally and is a forward-planning resource.
- National Plan has no clear mechanisms to show which level you're at – who makes the decisions? Should this be the role of a task group?
- There should be clear lines of responsibility between DH and HPA
- There should be clarity around data reporting – how many cases?
- NRPB has 'sitrep' reports to sharpen minds.

Communications

- Syndicates were driven by the media. They responded, but they didn't control it. They confirmed it as a case of SARS at 10.10am.
- Lack of co-ordination of messages – people didn't talk to each other
- DH Press officer on voicemail and others didn't know anything about the exercise, so couldn't brief the DH team
- SHA communications should tell the regional communications, who tell DH
- Need to check that what they propose to do is OK.
- All interviewees failed to ask whether it was live or recorded, did not have their press officers with them, did not ask what questions were going to be asked, did not maintain eye contact and did not come with clear messages
- Why did Wales and England handle it differently – as Wales had closed hospitals, it looked like England was putting people at risk
- What measures are in place for internal communications eg how to explain to patients why hospitals are being closed?
- Who on site will deal with the 'worried well'?
- Messages must be consistent, across the board

- Communications should be cleared up and down the lines – operational communications must go past ministers to central Government and staff communications must go via Press officers to central Government

ANNEX 2

Comments from delegates

What are the three most important things you learned from the exercise?

1. Be clear who is responsible for what
2. Cross divisional links
3. Need for surge capacity and relief arrangements

1. Need for clarity on the roles of CDSC and HPA Central (ie difference between Operational Management and Strategic)
2. Need for the plan to require routine written 'sitreps' so there is clarity on the real situation
3. The Plan needs to address the mechanism for determining the level status

1. Media pressure
2. Need for clarity of roles
3. Need for clarity of facts

1. The complexity of inter-relations
2. Communications +++
3. HPA role in relation to its various divisions and DH requires greater clarity

1. What and how other parts of the NHS work
2. Importance of clear communications
3. Keep all relevant players in the action being taken

1. Poor access to personal protective equipment (PPE) for management of probable cases
2. There are many organisations and groups of people who can assist that not everyone is aware of eg strategic HAs and their role
3. Importance of pooling of contact lists to give an accurate image to Press etc.

1. Better communications
2. Better resource control
3. Careful communication and support for staff

1. The chain of communication
2. Agencies and people involved
3. Issues – public behaviour, media, logistics

1. The organisational detail of the NHS in the SW Region and roles
2. The lack of clarity regarding the cross-NHS framework within which major incident management (MI) occurs.
3. The importance of easy and rapid interaction in the course of a Major Incident.

1. Lack of speed in communication between senior management system and 'shop floor workers'
2. Difficulty in gaining personal protective equipment
3. Lack of regional/national co-ordination!

1. Importance of communication
2. Impact of one case on normal running of hospital
3. Lack of personal protection available

1. The effect of media pressure
2. The need to clarify roles/responsibilities
3. Does NHS have capacity?

1. Need for better organisation on who does what
2. Looking after and maintaining staff continuity
3. Long way to go on joined-up working

1. PPE provision should have a two-stage national plan: (a) strategic national stock along the line of the 'pods' to provide buffer stock and (b) secured dormant contracts for exceptional manufacture with preferential NHS supply
2. Lines of communication/responsibilities of Government Office/HPA/SHA are blurred and require clarification
3. How will national tiers of action be communicated?

1. Insufficient stocks of PPE nationally
2. Need to plan for assessment zones in community, not at hospitals
3. Need to ensure staff confidence in measures to ensure they continue to come to work

1. Importance of clarity of reporting lines
2. Importance of communication/sharing information
3. Demand of the media

1. Need for regular channels of communication
2. Need to clarify relationship of Welsh with the HPA

1. Local services are highly devolved
2. Not necessarily a clear chain of command
3. Press co-ordination problems

1. HPA needs lines of communication on press issues with local PCT/SHA
2. Communication channels between local and national need to be strengthened – press officers were communicating most

1. Need for rapid access to PPE
2. Need to give more thought in planning for community contact tracing
3. Adequate support and encouragement for staff will be hard to embed and difficult to achieve

1. Teamwork
2. Co-ordination
3. Flexible interpretation of national SARS guidance eg case definitions

1. Planning
2. Planning
3. Planning

What changes, if any, will you make to your existing SARS plan?

- Comments to national plan co-ordinator and regional leads for their plans
- Difficult issue of co-ordinating English and Welsh approaches, particularly in respect of communications
- Include DH
- Integrate with other plans
- Clarify PPE stocks. Ensure safe storage to prevent unnecessary usage on non-SARS cases
- Revisit outbreak plan to include personnel list of appropriate persons present
- Need to be fully executed
- Modelling feedback – effect of disease on staff, media, behaviour on epidemic
- Stronger definition of 'confirmation' for SARS (when it is confirmed for cases)
- Clearer connection between the range of plans from different levels to achieve a coherent approach
- Major issue regarding communications with other hospitals and also regional government offices
- Designate a ward for potential SARS cases
- Look at ICU capacity
- Look at emergency department capacity
- More generic joined-up approach required
- Review and revise
- Avoiding use of nebulisers where possible
- Encompass 'rising tide' ie SARS scenario with generic major incident plans
- Clarify communication lines
- Update guidelines and expand to cover home isolation and quarantine in more detail
- Case definition
- Quarantine of contacts
- Reporting system
- It needs a media handling element
- Clarify arrangements for access to PPE
- Consider strengthening staff training eg in contact tracing
- Lots of detailed points

- We don't have one

Did the exercise scenario provide you with enough information? What else might have been useful?

- More details on where cases were in later stages
- In the morning the different timeframes for Bristol and Wales were confusing for those playing at the national level
- Not in later stages. Need more info on 'cases'
- No – more specific info would have been useful in the later stages
- Needed better liaison with the DH comms team who were not present
- It might have been useful to have guidelines on interruptions from other groups
- No – time scales too short
- Yes – some confusion over the times and days so different groups were operating to different days.
- More detail on what happens at each step
- Better UK rather than England-only response needed
- Yes, but information going up was not matched by information coming down
- Inserts too slow
- Improve timeliness and continuity of supporting information
- Not quite – needed more detailed info of the situation at the local level to feed the various levels
- No – needed to have a way to confirm facts as would in real life
- No – confusion about his. It seems people had to make up their own scenarios
- Yes, more epidemiological data
- No. Could have been better structured, especially pm

Did you already know about the WHO interim guidelines on SARS?

- Yes 16
- No 4
- Personally not! Whether my department did..!

Do you think there should be a national plan for all Communicable Disease Control?

- Yes, ensures roles and responsibilities are clear and provides a checklist of actions 4
- There needs to be a framework national plan covering the key points
- Yes, multi-agency
- Yes – clarity for the profession on what, how, when to act and contact
- Yes – it would prevent duplication and, so long as it goes out for extensive comment, it could be very representative of Nation.
- No – many (eg Norovirus, common colds) do not present serious enough problems and diseases are too different
- Unsure. Maybe certain 'givens' should be provided and framework
- Definitely. Allegedly lurking in the **National** Health Service but plans in place are very localised (even down to our hospital!)

- Strongly – national co-ordination is essential
- There are many common threads in controlling communicable diseases
- Only a generic structure, not detail
- Could be useful, generic principles annexed with disease-specific sections
- Yes – ensure continuity and inter-regional co-operation, co-ordination and support
- Possibly – not much reference made to plans during the exercise
- Isn't there? Plans disease and source specific
- Yes, because of the threat of new emerging infectious diseases
- Maybe, but local plans are the basis of adequate CDC
- Yes, cos it's obvious there should be

Any other comments?

- DH comms team should have participated
- A good event! Some helpful transferability also to other areas of major incident planning
- Lunch poor – no pudding, fruit or cold drinks; flip pads and pens very well worn. Poor facilities (Bristol local) were not conducive to full debate
- Regional and national bodies were not proactive in supporting local response!
- Super experience

ANNEX 3
Observer Reports

How would the scenario affect your organisation?

- Would affect London Resilience.
- 1 suspect case would be easy to deal with. Subsequent UK community spread could cause problems in terms of isolation/ITU facilities
- Will re-examine plans
- Ability to function – absentee staff
- Communication plan between N10, Executive, Dublin, London and Scotland
- Terrorist/accidental release issue
- Will need to tighten what we and others do
- Greatly
- Without 'exercised' contingency plans and relevant prior warning, confusion could occur. Confusion still exists over roles and responsibilities.
- Impact on whole community with subsequent problems
- Once the crisis began to impact on public order, the Home Office would be involved. If COBR was convened, HO would provide personnel to COBR and possibly Gold
- Can't see an obvious impact initially – need to issue advice to those working in the hospitals and possibly other workers (but probably more important as an outbreak escalates
- The effect on my organisation (Local Authority) would be incremental ie quite small for 1 or 2 cases, to total for a major outbreak
- The Health Service seems to be unsure about the role of its partners in the event of a major incident. It needs to be more outward-looking and share its plans, exercises and guidance more

Was the scenario realistic?

- Yes 7
- Up to a point. It was very clinically-orientated and was not generalised to include community reactions and strategic options.
- Needs to be inclusion of Bristol/Cardiff airport implications. What advice is there on travel? (We did have an insert on this but could not use it in the end)
- Partial – normally would have been able to check information
- In part – perhaps a wider range of scenarios
- Very interesting to observe reactions at the local level
- Yes, but the way it progressed was to involve the regional players too soon.

Have you learned anything from the exercise?

- Confirmed the need for Regional Resilience Teams
- Paper exercises clearly suffer from compression of events and lack of key staff eg local CCDC (Local CCDC was there!)

- Local pre-planning procedures should take place – both areas involved did not seem to have clear action plans
- Clear communication makes life easier
- That things have become more complicated than ever and that things need to be simplified
- Need to establish roles and responsibilities
- Yes
- Yes- difficulties with Wales
- Quick escalation, demands on staff and importance of communications
- More questions than answers!
- The importance of a defined control and co-ordination structure and the need for effective communications
- Taken lots of notes – need to go back to the office to digest. Importance of communication, vertical and horizontal
- Need to identify what are the triggers for a major incident
- I have learned how unco-ordinated the different parts of the health service are!

Would full multi-disciplinary exercise be useful?

- Yes, knowing how each other agency works is important.
- Not just beneficial, necessary.
- Only if properly arranged and controlled
- Who else do you think should be involved? This exercise seemed to have a pretty wide scope.
- Critical for building relationships and knowledge of who does what
- It is a must

What recommendations would you make for improving response to SARS at the following levels?

National

- Legislation
- Lines of communication need to be clear
- Pre-emptive planning and action during a lull in activity
- Sort out responsibilities
- Clear lines of communication
- Command and control clarity
- Better understanding and communication
- One control and co-ordination structure must be in place with effective access to all Government departments and with an effective communications network
- Agreed national strategy setting minimum standards and ensuring consistency throughout the UK
- Enough staff available to respond – press office/policy/operational, as appropriate – ie don't have only 1-2 people who are aware of all moves and can handle because if they're absent, who deals with it?
- Putting the agreements/protocols in place beforehand so that we all know who does what.
- More information on national leadership

Regional

- Legislation
- Review roles and accountability
- Strategic planning
- Airport control advice
- Tighten up the reporting of cases
- Better understanding and communication
- Regular exercising of national plan in a regional context
- Putting the agreements/protocols in place beforehand so that we all know who does what.
- Regional Resilience forum needs to exercise ASAP

Local

- Legislation – Public order/cordons
- The procedures to streamline suspected patients who require hospital care need to bypass A&E admission and go directly to isolation facilities. Toronto shows this is very important in reducing spread, but this exercise did not address this issue.
- Improve data collection, analyses and interpretation
- Train staff on the plans
- Clarity on resources available
- Practise plans
- Better understanding and communications
- Must have speedy system to call and form a multi-agency control and co-ordination structure with access to specialist info and effective communications system
- Regular exercising of national plan in a local context
- Be prepared in advance if giving interviews to the Press.
- Make sure everyone is informed – don't assume that other organisations have the information you do.
- Putting the agreements/protocols in place beforehand so that we all know who does what.
- More local co-ordination and exercising