Assessment tool for influenza preparedness in European countries – with a main focus on pandemic preparedness

European Centre for Disease Prevention and Control (ECDC)

In collaboration with

the European Commission and

the World Health Organisation Regional Office for Europe

Version September 2006

This assessment tool was developed in 2005 by the Unit for Preparedness and Response at the European Centre for Disease Prevention and Control (ECDC) in Stockholm, in collaboration with the European Commission and the World Health Organisation Regional Office for Europe. Comments on the tool are welcomed and should be directed to influenza@ecdc.eu.int . The current, second version is also available online at http://www.ecdc.eu.int/Influenza/Assessment_Tool.php

What is different in the September 2006 edition?

This edition has been improved and developed in the light of experience in the earlier assessments. Specifically:

- The assessment tool itself is now required to be filled in beforehand by the key contact in the country as it has become more complex, so that time is efficiently used during the assessment visit
- More emphasis is put on local preparations and the operationalising of national plans at the regional and local level, especially in the health services
- There is more attention paid to intersectoral work (i.e. with the non-health sectors, education, security etc) and with neighbouring countries (interoperability)
- There is more emphasis on the measures around seasonal influenza and especially influenza vaccination.
- There is a more detailed section on laboratory preparedness
- The communication aspects have been further developed
- Preparations for an outbreak of highly pathogenic avian influenza are being emphasised in the light of the outbreaks experienced in the EU
- The key indicators have been adjusted to conform to the above developments and there are more subsidiary indicators indicating work that builds around these

- The assessment report pays more emphasis on development work plans

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Acronyms

EU	European Union
ECDC	European Centre for Disease Prevention and Control
WHO	World Health Organization
WHO EURO	World Health Organization Regional Office for Europe

Section 1 – Introduction and use of the tool

Introduction

Work on improving pandemic influenza preparedness in Europe has been underway since March 2005. The work has centred around regular workshops organized jointly by the European Commission, the European Centre for Diseases Prevention and Control (ECDC) and the World Health Organization, Regional Office for Europe (WHO EURO) in Luxembourg, 2–3 March 2005, Copenhagen, 24-26 October 2005, and Uppsala, 15-17 May 2006. Major progress has been achieved. By October 2005 all 25 European Union countries and almost all countries outside the European Union but within the WHO EURO region had a preparedness plan.[1] -However much more requires to be done and there is an ongoing need for political commitment to extend planning down to the local level and across into cross-sectoral issues, for increased resources, for more operational research, for the resolution of complex legal and ethical issues, and developing common solutions and improved cross-border co-operation (so-called *interoperability*).

This tool and the procedures described provide a mechanism for the assessment of national pandemic influenza preparedness. They were first developed for country support visits by joint expert missions by the European Commission, the ECDC and WHO EURO in 2005, but they can also be used for self-assessment

[1] http://www.ecdc.eu.int/Influenza/National_Influenza_Pandemic_Plans.php

by countries. The tool is publicly available on the ECDC website[2]. In structure it follows the main components of the European Commission communication on pandemic influenza preparedness and response planning in the European Community[3], the WHO global influenza preparedness plan[4] and the WHO checklist for influenza pandemic preparedness planning[5]. It has evolved considerably over time representing the experience of the country and the advancing agenda of pandemic preparedness. While the European Commission and WHO documents help countries to structure their plans, the tool allows evaluation the preparedness status and particularly helps countries to identify gaps and plan future work. Therefore, the documents complement each other. In addition, the tool provides *key indicators* that can be used by countries to objectively monitor their preparedness and *subsidiary indicators* to indicate items that should be covered in work plans.

Objectives

The objectives of the assessment tool are:

1) To evaluate the status of influenza preparedness - with the main focus on **pandemic** preparedness - but addressing also protection against human seasonal influenza and preparedness against transmission of highly pathogenic avian influenza to humans.
2) To determine a baseline of influenza preparedness and response, or to determine progress made since earlier assessments.
3) To identify weaknesses and strengths of influenza preparedness.

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[2] http://www.ecdc.eu.int/Influenza/AssessmentToolPandemicInfluenzaPreparedness_6_2_2006.pdf

[3] Communication from the Commission to the Council, the European Parliament, the European economic and social committee and the committee of the regions on pandemic influenza preparedness and response planning in the European Community, at http://europa.eu.int/eur-lex/lex/LexUriServ/site/en/com/2005/com2005_0607en01.pdf

[4] http://www.who.int/csr/resources/publications/influenza/WHO_CDS_CSR_GIP_2005_5.pdf

[5] http://www.who.int/csr/resources/publications/influenza/CDS_CSR_GIP_2005_4.pdf

4) To identify steps for improvement and areas where support from the ECDC or partner agencies should be requested.

What should guide the assessment?

The procedures described in the assessment tool aims to involve the leading country agency/s in influenza preparedness as essential players in the assessment. Influenza preparedness includes strong links to response capacity. The assessment is a joint activity between the national authorities and ECDC (with the European Commission and WHO EURO) with an end product of an agreed action list for improvement and a follow-up programme which also clarifies any further support needed from the ECDC or partner agencies. If the country does not yet have important components of a preparedness plan the assessment results in planning the development of these along with a methodology and timeline for completion.

How should the tool be used?

Influenza preparedness is essential at all levels of the political and societal structure of a country. The assessment addresses needs at national, regional, and local levels. The questions in the tool provide guidance for a discussion between assessment team members and national experts. The assessment teams consist of 3-4 external experts or independent internal experts, one of whom is the **team leader**, with the following skill sets:

- Infectious disease and control (specifically influenza)
- Public health planning
- Clinical care
- Infectious disease laboratory sciences
- Communications

In addition, language skills within the team need to be considered.

The assessment procedure provides information whether the country is prepared for influenza in general, including seasonal influenza and avian influenza, specific pandemic influenza phases, knowledge about pandemic influenza is sufficient, key persons know their roles and responsibilities, and preparedness structures are operational. Team members follow the questions to document quantitative and qualitative information. Indicators and comments for each question guide the team member about what information should be documented. The information should be as specific as possible. For example, names of responsible organizations or functions, locations of databases and dates of exercises should be documented. A minimum answer includes whether a document is available and/or information referring to his/her role in the preparedness is known by the national expert. The team member should add a qualifying statement, for example that a document is available but insufficient, giving reasons why, or the national expert has excellent knowledge, again with reasons why. The WHO global influenza preparedness plan and checklist for influenza pandemic preparedness planning are used for more detail on specific topics or as a reference for feedback on weaknesses identified. The expected length is 60-90 minutes per visited unit, but this will vary depending on the local context.

The assessment tool starts with a list of key indicators that summarizes the influenza preparedness status of the country, followed by sections about seasonal influenza, pandemic influenza, avian influenza and laboratory preparedness. The pandemic assessment is divided into parts for public health decision-makers at the national and local level. The assessment at national level addresses general preparedness in the interpandemic period, with a main focus on a preparedness plan. This generally part follows the five main components of the WHO global influenza preparedness plan[6].

[6] '*containment*' has been reworded to be '*reduction of transmission'*:

- Planning and coordination
- Situation monitoring and assessment
- Prevention and reduction of transmission
- Health system response
- Communication

The local part of the assessment contains individual components for decision-makers in public health, health care services and laboratories. In this part, team members discuss practical preparedness, usually at the local level, including a hypothetical case scenario of moving into a pandemic phase 6 situation. This would ideally require a simulation exercise, which is not feasible during an assessment visit. However, a discussion using a case scenario key operational issues to be confronted for pandemic influenza. The discussion does not aim to be exhaustive and cannot be representative for the local level in general, but can provide indications about gaps in day-to-day functioning of preparedness during a pandemic ('hypothesis generating'). The discussion should also emphasize that the transition from pandemic alert phases 3-5 to pandemic phase 6 may last several weeks or even months with a SARS-like scenario with limited transmission between humans and clusters of influenza cases before pandemic phase 6 starts. Strategies and contingency plans need to address preparedness during the different phases. Equally it may be that the world may move to phase 6 almost immediately. The local level assessment can also be used at the national level if a visit outside the capital is not feasible or considered useful at the time of the assessment. The assessment ends with a description of avian influenza preparedness, including control of outbreaks in animals and protection of humans affected. This part has gained increasing importance with the spread of avian influenza to countries of the WHO EURO region and transmission from birds to humans in several countries.

Procedures, activities and timetable of the assessment

After an agreement has been reached with the country on the objectives and time of the visit, a detailed agenda is developed in collaboration between a key contact in the country identified by the Ministry of Health, and the leading agency for the visit (usually ECDC). Crucial to this is the key contact arranging for collection of the data essential for the visit prior to the visit (see below).

National Preparedness: During the visit, part of the team stays in the capital to review pandemic influenza preparedness at national level. Stakeholders to be interviewed at national level are from the following list or their equivalents in the country:

- Ministry of Health/main authority responsible for influenza preparedness, including the link to response capacity
- Ministry or other body dealing with emergencies specifically the inter-sectoral aspects of influenza
- Ministry of Agriculture (to discuss avian influenza preparedness and coordination between animal and human sector)
- National public health agency
- National influenza committee
- National health communication structure
- National influenza centre/national influenza reference laboratory
- National surveillance system for influenza
- Public health care service (e.g. main infectious disease hospital) (optional)
- A representative of relevant Regional/local Structures
  The regional representatives have become increasingly important as emphasis has moved to focus more on local preparations.

Local Preparedness: The other part of the team visits the local level structures. Stakeholders to be interviewed are from:

- Public health agency (i.e. local public health structure responsible for planning and operations)
- 1 public, 1 private health care service (usually a hospital)
- 1 laboratory

The average duration of a country visit is 3-4 days. A thorough preparation of the country visit by the key contact, working with guidance from the leader for the visiting team to complete the data collection prior to the visit identify the key persons to meet, set the meeting times, organize local travel, and translation services if needed. Close communication between the key contact in the country, who does the planning, and the coordinator of the visiting team is essential. The key's contact's role is to:

- Determine the time table and make sure all the relevant people in the country are briefed and informed about the visit
- Coordinate completion of the Assessment Tool before the visit
- Ensure administrative arrangements are made for the visiting team
- Work with the visiting team coordinator on the draft and final report

The time table presented here requires that detailed planning is finalized before the visit. On the morning of the first day, the team often stays together for a meeting with the main authority responsible for pandemic influenza preparedness. This meeting is important to familiarize the team with the national political and health system and the specific emergency and pandemic influenza preparedness structures. The team splits then into sub-teams to continue the

assessment at national and local levels. However, the agenda of the visit may need to be adjusted according to preparedness level in the country is at a relatively early stage. In which case travel to the local level may not be useful, and the visit may focus on assisting the host country in outlining a preparedness plan and other essential structures and contingency plans as described in the WHO documents and in this Tool. The visit may then be limited to 3 days, and 2 experts may be sufficient. One or two health facilities may then be visited on the municipality level of the capital to discuss integration of existing emergency plans into specific pandemic influenza preparedness. Presence of a translator during the visit needs to be considered. The assessing team should be familiar with documents referenced in this Tool and national web pages concerning pandemic preparedness. In Russian speaking countries, the WHO preparedness documents should be available, translated into Russian and in paper version to be handed to the partners in the country. The assessment team should also encourage reviewing other countries' preparedness plans.

Given the public and media interest in pandemic preparedness the option of holding a press briefing at the end of the visit can be considered. The briefing would be given jointly by the public health authorities of the country being visited and the international team and would focus on progress being made, rather than shortcomings, in pandemic preparedness. Such briefings would only be organised where the host country wishes.

Time table for an assessment visit

Days	Activities
Before the visit (all team members)	Team members familiarizing themselves with the tool, web pages referenced in the tool, and the situation in the country to be visited (e.g. health system structure, available pandemic preparedness documents, websites); detailed planning of the visit with partners in the host country.
Day 1 (all team members)	Initial team coordination briefing Meeting with main authority responsible for pandemic influenza preparedness Information gathering Evening, leaving for site visits (or next morning)
Day 2	Continuation of consultation at national level for sub-team 1 Site visits for sub-team 2 Evening, returning from site visit (option)
Day 3	Continuation of consultation at national level for sub-team 1, joined with sub-team 2 after returned from side visit Continuation of site visits for sub-team 2 if needed Preparation of joint preliminary team report (all team members)
Day 4	Preparation of joint preliminary team report (all team members) Sharing and discussing the preliminary report with host country and asking to correct misjudgements Debriefing of national health authorities *Joint press conference with the nationals*[7]
After the visit	1. The external team leader for the visit consolidates the elements of the preliminary draft report and asks mission members to comment. 2. The team leader sends the preliminary draft to the key contact in the country to comment upon in the following five working days (this stage may take longer if the key contact wishes to get input from others in country). 3. The team leader takes on comments from country and forwards them to mission members. After the country comments have been integrated and signed off by the people designated by the key contact, the draft report becomes the final report. 4. Final report is sent to a designated authority in the country by the team leader (usually under a covering letter from the lead external agency – e.g. by the Director of ECDC) with copies to the mission members. 5. A follow up meeting/discussion takes place max. 12 months later to review the implementation of the recommendations

[7] Optional at the discretion of the countries

Distribution of the report	The report will be shared only between the visited country and the ECDC, WHO EURO and the European Commission, unless there is an additional agreement of the responsible authority in the visited country. The findings are not shared outside these organization without the consent of the country though anonymised data are used for summary purposes and comparisons

Reporting results

The tool is filled in beforehand by the key contact. Usually during the visit handwritten notes are taken, and after the assessment meetings the notes are consolidated into a report. The 'findings' fields in the tool are amended after a discussion or can be used for direct typing of results during discussions. The tool with completed 'findings' fields is a useful way to capture results in addition to the assessment report. The final report about the assessment should cover the following areas:

Summary including specific recommendations for work and development (a work plan)

Purpose of the visit or self-assessment

Background

Application of the assessment tool

Key indicators

Seasonal influenza

- Seasonal influenza surveillance
- Seasonal influenza vaccination programmes
- Laboratory capacity

Pandemic influenza

- Planning and coordination
  - Political awareness
  - Legal and ethical framework
  - National pandemic planning committee
  - National influenza pandemic preparedness plan
- Situation monitoring and assessment
  - Surveillance system prepared for pandemic
  - Outbreak investigation capacity
- Prevention and reduction of transmission
  - National public health response (non-pharmacological, antivirals, pandemic vaccines)
  - National civil emergency response including intersectoral response
  - Simulation exercises
- Health system response
  - Contingency plans, infection control and management capacity, training of workforce
- Communication
  - National communication strategy

Avian influenza (including laboratory aspects)

Overall conclusions

- Findings

Recommendations (country and European level – also appears in the Summary)

Acknowledgements

Appendices: time-table, people met, documents presented, completed assessment tool etc.

Section 2 – The Assessment Tool

Key indicators

Twenty indicators have been defined as **key indicators** because they are considered especially important for national preparedness. The indicators may be used as a quick checklist for the preparedness status and reported in a table that can be updated by the national authorities.

	Goal	**KEY INDICATOR**	**CURRENT STATUS**	***Instructions in italics*** **Comments and notes by those filling in**
	SEASONAL INFLUENZA AND VIROLOGY		**Y = yes / N = no**	
1.	**An influenza surveillance system in place collecting epidemiological and virological information**	**1. Surveillance data published during the influenza season for:** **(a) National Level?** **(b) Administrative regional level?**	 **Y / N** **Y / N**	*Please comment on the coverage of the influenza surveillance system and any limitations*
2.	**National laboratory capacity able to provide timely, high quality, validated routine and diagnostic influenza laboratory support with committed budget to facilitate this work**	**2. National laboratory capacity to perform:** **(a) Virus isolation?** **(b) Influenza typing?** **(c) Influenza subtyping ?**	 **Y / N** **Y / N** **Y / N**	*Please comment if laboratories participate in WHO Global Influenza Surveillance Network and potential limitations*
3.	**National annual seasonal influenza vaccination programme in place achieving >75% uptake in over 65s and increasing uptake in occupational and clinical risk groups**	**3. Vaccine uptake figures published annually?**	**National annual uptake in persons aged >65 available: Y/N** **If yes: year: _____** **%: _____**	 *Last year available Uptake in %*
	PANDEMIC			

	PLANNING AND COORDINATION			
4.	**National planning committee/structure in place that has a coordinating role for pandemic preparedness**	**4. List of participating bodies/members?**	**Y/N** **If yes:** **Cross-sectoral: Y/N**	*May be the national influenza committee or similar structure* *Is this a cross-sectoral group that coordinates also non-health sectors?*
5.	**National pandemic plan consistent with international (WHO and EU) guidance, publicly available**	**5. National health sector influenza plan?**	**Y/N** **If yes:** **Last month/year updated: _____**	*Please provide details of where the plan is published (i.e. web addresses)*
6.	**National command and control structure in place for managing an influenza pandemic**	**6. National command and control structure?**	**Health services command and control structure Y/N** **Cross-sectoral command and control structure Y/N**	*Please provide a summary diagram and/or explanation of this national level command and control structure*
7.	**National contingency plan for maintenance of non-health essential services, such as power supply, food distribution etc, publicly available**	**7. National contingency plan for maintenance of non-health essential services?**	**Y/N** **Last month/year updated: _____**	*Please provide details of where the plan is published (i.e. web addresses)* *Please comment on the sectors covered by the plan*
	SITUATION MONITORING AND ASSESSMENT			
8.	**Ability to detect initial cases, and to monitor the spread and impact during the different phases of a pandemic**	**8. Pandemic surveillance and information plan?**	**Y/N** **If yes:** **Last month/year updated: _____**	*Please comment on any specific changes from the seasonal surveillance system in place, and whether this plan has been tested.*
9.	**Ability to investigate initial cases of a pandemic influenza strain**	**9. Outbreak investigation capacity?**	**Y/N**	*Please comment on any specific measures taken to ensure this capacity for the early phase of a pandemic*
	PREVENTION, MITIGATION AND TREATMENT (includes health system response)			
10.	**Public education**	**10. Public**	**Material on seasonal**	*Please provide details*

	materials as part of a national strategy on personal non-pharmacological public health measures (personal hygiene, self isolation)	**education materials available?**	**influenza published Y/N** **Material on pandemic influenza ready Y/N**	*of where the plan is published (i.e. web addresses)* *Please comment if under development, and when expected to be finalized*
11.	**National strategy for community non-pharmacological public health measures (travel, mass gatherings, school closures etc)**	**11. Group established to develop such a strategy?**	**Y/N** **If yes:** **month/year of last meeting: _____**	*Please comment if this has been considered but not been started yet.*
12.	**National antiviral strategy developed, including plans for procurement, stockpile and delivery to patients**	**12. National antiviral strategy developed?**	**Y/N** **If yes:** **Last month/year updated: _____**	*Please comment if under development, and when expected to be finalized* *Please comment on plans for stockpiling, including percentage of the population to be covered.*
13.	**National pandemic vaccination strategy developed, including procurement, distribution and targeting of pandemic vaccines**	**13. National pandemic vaccination strategy developed?**	**Y/N** **If yes:** **Last month/year updated: _____**	*If developed, please comment whether H5N1 human ('pre-pandemic') vaccines are part of strategy.* *Please comment if under development, and when expected to be finalized*
	REGIONAL AND LOCAL ARRANGEMENTS			
14.	**Regional/local planning and coordination structure for pandemic preparedness in place**	**14 Regional/local planning and coordination structure?**	**Y/N** **If yes:** **Cross-sectoral: Y/N**	*Is this a cross-sectoral group that coordinates also non-health sectors?*
15.	**Regional/local health services able to cope with an influenza pandemic and continue to provide other essential health services**	**15 Planning document issued to local health services which includes the nationally agreed parameters for which local services should plan (expected range of cases**	**Y/N** **If yes:** **Last month/year updated: _____**	

		and percentage of staff off sick)?		
	COMMUNICATIONS			
16.	**National communication strategy developed and published**	**16 National communication strategy?**	**Y/N** **If yes:** **Last month/year updated: _____**	*Please provide details of where the strategy is published (i.e. web addresses)* *Please comment if under development, and when expected to be finalized*
	INTERNATIONAL INTEROPERABILITY			
17.	**Potential impact of measures for neighbouring countries and the EU discussed**	**17. Joint work undertaken with neighbouring country/s on mutually relevant policy areas?**	**Y/N** **If yes:** **Last month/year of joint work: _____**	*Please comment on the proportion of neighbouring countries contacted and give examples of joint work undertaken*
	PANDEMIC EXERCISES			
18.	**Pandemic preparedness regularly and systematically tested at all levels and across all sectors, including lessons learnt, report published and fed back into planning.**	**18 National level health sector exercise?**	**Y/N** **If yes:** **Last month/year of exercise: ____**	*Please comment on type/scope of exercise*
	AVIAN INFLUENZA			
19.	**National system in place for influenza surveillance in animals (including wild birds) which meets EU requirements**	**19 National system for influenza surveillance in animals?**	**Y/N**	*Please comment when last time data from this system were available to the public*
20.	**National capacity for managing an outbreak of HPAI with human health implications, developed in collaboration between health and veterinary authorities**	**20. Joint health and veterinary plan or complementary plans?**	**Y/N** **If yes:** **Last month/year updated: _____**	*Please comment on the type of plan (joint human/veterinary or two complementary)* *Please provide details of where the plan is published (i.e. web addresses)*

There are in addition **subsidiary indicators** which are there to point out sub-areas requiring attention as contributors to a particular area. If these have not been attended to they should usually be addressed in the recommendation and workplan. Instructions are for interviewers and any other person who responds.

Seasonal influenza

Seasonal influenza surveillance	**Key indicator: Surveillance data published during the influenza season for:** **(a) National Level?** **(b) Administrative regional level?** **Subsidiary indicators:** **Representative sentinel primary care surveillance across whole country?** **Virological surveillance across whole country:** **(a) Based on clinical samples?** **(b) Based on structured sampling?**
Instructions for responding: Describe the routine surveillance system of notifiable diseases (seasonal influenza included?), and (if available) specific sentinel system for seasonal influenza.	
Findings:	

Laboratory capacity in terms of a designated national or "lead" influenza laboratory	**Key indicator: National laboratory capacity to perform:** **(a) Virus isolation?** **(b) Influenza typing?** **(c) Influenza subtyping?** **Subsidiary indicators:** **Name and location of laboratory?** **Participates in WHO Global Influenza Surveillance Network?** **Number of specimens that can be handled per day at lead laboratory?** **Regional Laboratories with explicit resources using nationally agreed protocols for identification of viruses taking part in national recognised QA scheme?** **Specimen transport arrangements in place for getting specimens to national centre?** **Number and qualifications of staff in NIC?** **Explicit plan for NIC surge capacity accepted by management?** **Time from receipt of specimens to being confirm to WHO a novel type (H5N1)?**
Instructions for responding: The goal is to have at least one laboratory that is able to provide timely, high quality, validated routine and diagnostic influenza laboratory support with committed budget to facilitate this work. Does the laboratory have sufficient supplies, personnel and biosafety (e.g. if the number of daily incoming specimens increases to 4 times the normal amount; is there surge capacity personnel from other parts of the laboratory)? Does it collaborate with the veterinary influenza laboratories in the country? Does it participate in an external quality assurance programme? Is it linked to an international network (e.g. the EISS laboratory network, currently the Community Reference Laboratory for Human Influenza)? Have specimens been sent	

for confirmation in an international reference laboratory? Have local laboratories been equipped and trained in testing of potentially highly pathogenic influenza (e.g. using Real-Time PCR)?
Findings:

Seasonal influenza vaccination	**Key indicator: National annual uptake in persons aged >65 available: Y/N** **If yes: year: _____ %: _____** **Subsidiary indicators:** **Risk groups identified in published policy document?** **Information systems can deliver uptake figures for the elderly at lower administrative levels?** **Incentives to improvement considered?** **Pro-active annual improvement programme in place with explicit targets for the elderly as per WHO (60%) or better?** **Annual national publicity campaign (documents available)?** **Able to routinely measure uptake in other risk groups** **Routinely measure total use of influenza vaccine? Data for last year available?**
Instructions for responding: Interviewer should discuss functioning of a seasonal vaccination policy. Which vaccines are registered in the country, which population groups are vaccinated, what is the coverage, are data on coverage routinely available and published, and what the cost of vaccination? Are seasonal vaccines available for additional need during a pandemic phase scenario? In 2004, WHO's Member States set a goal of 60% coverage for those in high-risk groups and 75% coverage by 2010[8]. High-risk groups include the elderly, those who are at increased risk because they have other respiratory or cardiovascular disease, and health care workers. As a minimum, the elderly should have access to vaccination, seasonal coverage should be available, and coverage should be 60% or higher. In addition, the number of elderly vaccinated compared to the total number of persons vaccinated should be available as indirect information on other high-risk groups targeted.	
Findings:	

[8] www.who.int/mediacentre/news/notes/2005/np05/en/index.html

Pandemic influenza, part A (national level):

Planning and coordination

Relevance of pandemic planning recognized by decision-makers.	**Indicator:** Preparedness policies developed and adopted
Instructions for responding: Potential magnitude and severity of a pandemic phase scenario is recognized, preparedness is high on the political agenda; any tendency to down-play, e.g. 'we will not be the first affected and can learn from others'?	
Findings:	

Legal and ethical frameworks established coherent with international legislation (International Health Regulations)	**Indicator**: Frameworks established: Y/N
Instructions for responding: Legal framework may be for emergencies in general or for specific diseases such as small pox or SARS. If emergency legislation does not cover pandemic influenza, potential time delays to adapt the current law should be discussed. Legal issues to be addressed include the enforcement of quarantine for cases or suspected cases (overruling individual freedom of movement), use of privately owned buildings for hospitals, off-license use of drugs, compulsory vaccination or implementation of emergency shifts in essential services. Interviewer should ask whether an ethical committee has been involved in ethical issues discussion.	
Findings:	

National planning committee/structure in place that has a coordinating role for pandemic preparedness	**Key indicator: List of participating bodies/members? Y/N** **If yes: Cross-sectoral: Y/N**
Instructions for responding: Other committees may exist or be planned that could take the role of a national planning committee. Interviewer should ask who is represented in a committee and what role it has in the planning and decision making process. Has the committee met, e.g. to advice on the preparedness plan, or will it only meet when a pandemic threat situation is developing in the country?	
Findings:	

Regional/local planning and coordination structure for pandemic preparedness in place	**Key indicator: Y/N** **If yes: Cross-sectoral: Y/N**
Instructions for responding: Is this a cross-sectoral group that coordinates also non-health sectors?	
Findings:	

Country has national influenza pandemic preparedness plan that is consistent with international plans, periodically updated and publicly available.	**Key indicator: National health sector influenza plan? Y/N** **If yes: Last month/year updated:** _____
Instructions for responding: For a checklist of essential plan components see Annex 1. When was the plan finalized and last updated? Does it include the pandemic phases that have been updated in the WHO global influenza preparedness plan from March 2005 (Annex 2), and the EU phases (Annex 3)? Does it address both scenarios of outbreaks in birds with sporadic transmission to humans and sustained transmission between humans, or is there a specific contingency plan for avian influenza in animals (see 'avian influenza' part of the tool)?	
Findings:	

If plan not finalized:

Country is in process of producing and revising a plan; responsible organizations/individuals and a realistic timeline for completion defined	**Indicator:** In process with responsibilities and timeline
Instructions for responding:	
Findings:	

If plan finalized but not adapted to revised WHO phases:

Country is in process of adapting to revised phases; responsible organizations/individuals and a realistic timeline for completion defined	**Indicator:** In process with responsibilities and timeline
Instructions for responding: Note that some countries are still using the old pandemic alert phases that have been updated in the WHO global influenza preparedness plan from March 2005, or may not have included the EU phases.	
Findings:	

National command and control structure in place for managing an influenza pandemic	**Key indicator: Health services command and control structure Y/N** **Cross-sectoral command and control structure Y/N** **Subsidiary indicators:** **Expert group established that would provide immediate advice in a pandemic** **Plans for a 'forward look' group established to anticipating needs and advising decision makers**
Instructions for responding: Needs explanation of the national political system- is the legislation and management during a pandemic phase more located at national or local level (e.g. in federally organized countries)? Does the structure include all levels in the country, not only national? Does it include sectors outside health? Are existing structures for emergency command and control are used and respected? What is the role of the interviewed person in a pandemic phase, and who makes which decisions? Should a state of emergency be declared, who declares?	
Findings:	

National contingency plan for maintenance of non-health essential services, such as power supply, food distribution etc, publicly available	**Key indicator: Y/N** **Last month/year updated: _____** **Subsidiary indicators:** **Underpinning operational modelling work undertaken (e.g. on possible staff absences and its impact)** **Anticipated resource implications for implementation addressed** **Monitoring of resource needs during pandemic addressed**
Instructions for responding: To be covered by separate contingency plans addressing maintenance of essential services such as emergency services, transport, food distribution, pharmaceutical supplies, utilities and communications, management of mass casualties, maintenance of public order, and the role of police and armed forces. Civil emergency response should consider implications of staff absence because of sickness, the need for staff to take time off to care for others, potentially increasing workload; databases for retired staff who may be asked to help; education and training needs for staff and volunteers.	
Findings:	

Situation monitoring and assessment

Pandemic surveillance and information plan	**Key indicator: Y/N** **If yes: Last month/year updated: _____**
Instructions for responding: This indicator addresses the ability to detect initial cases, and to monitor the spread and impact during the different phases of a pandemic. Countries should assess the burden of seasonal influenza on resources in order to plan for the overall surge capacity needed during a pandemic. Surveillance for early warning should be designed a) to detect unusual or unexplained events of acute respiratory or influenza-like illnesses/deaths in order to trigger appropriate public health and laboratory investigations, and b) to collect non-sentinel surveillance specimens during the whole year in order to detect potential new viruses. Surveillance should be based on WHO guidance[9]. Interviewer should ask whether country is part of Global Influenza Surveillance Network by establishing a national influenza centre (NIC), or ensuring that an existing NIC meets the WHO terms of reference. The surveillance network should have sufficient coverage and laboratory capacity. Epidemiological and virological data should be integrated. *EU preparedness:* *EU Member States (MS) are obliged to transmit information on detected human cases to the network of communicable diseases (reference laboratories) and the ECDC, using the Early Warning and Response System (EWRS), and other mechanisms, where appropriate. MS are obliged to apply EU-agreed case-definitions for reporting (WHO phase 3). MS share information on enhanced surveillance in risk groups (WHO phase 4).* [10]	
Findings:	

Outbreak investigation capacity available.	**Key indicator: Outbreak investigation capacity? Y/N** **Subsidiary indicators:** **Plan and database for gathering key information from the first cases in the country?** **Inventory of resources available for national outbreak team?**
Instructions for responding: This indicator addresses the ability to investigate initial cases of a pandemic influenza strain. Interviewers should ask for any specific measures taken to ensure this capacity for the early phase of a pandemic. For example, an inventory is an updated list of available experts who can provide expertise during outbreaks, including epidemiology, microbiology, coordination and management, logistics. List should include field of expertise, professional experience and contact details. Includes epidemiologic investigation to identify how suspected human cases of a new influenza strain became infected, to assess the clinical impact of the disease, and to determine the risk that infected persons or their environment may represent for others; investigations may identify a need for analytic studies – the WHO checklist addresses research issues during phase 2 and beyond, including evaluation of the response. *EU preparedness:* *MS are obliged to investigate case(s) and the epidemiological circumstances of infection, and identify risk groups and promptly communicate the results to the Commission and the ECDC (WHO phase 3). MS assess the risk and inform promptly on investigations (WHO phase 5).*	
Findings:	

[9] http://www.who.int/csr/disease/globalagenda/en/

[10] Communication from the Commission to the Council, the European Parliament, the European economic and social committee and the committee of the regions on pandemic influenza preparedness and response planning in the European Community, at http://europa.eu.int/eur-lex/lex/LexUriServ/site/en/com/2005/com2005_0607en01.pdf

Prevention and reduction of transmission

Public education materials as part of a national strategy on personal non-pharmacological public health measures (personal hygiene, self isolation)	**Key indicator: Material on seasonal influenza published Y/N** **Material on pandemic influenza ready Y/N**
Instructions for responding: Interviewer should ask for details of where the plan is published (i.e. web addresses) If materials are under development, we would like to know when they are expected to be finalized. Interviewer should be familiar with WHO recommendations for non-pharmacological public health measures in Annex 1 of WHO preparedness plan[11]; details on measures to prevent influenza spread in communities can be also found in the WHO preparedness checklist.	
Findings:	

National strategy for community non-pharmacological public health measures (travel, mass gatherings, school closures etc)	**Key indicator: Group established to develop such a strategy? Y/N** **If yes: month/year of last meeting: _____** **Subsidiary indicators:** **Cross-sectoral strategy (or working) strategy agreed for:** **International travel?** **National travel?** **Mass gatherings?** **School closure?** **Case isolation?** **Isolation of contacts?**
Instructions for responding: Measures include community infection-control, social distancing and quarantine, school closures and travel and trade restrictions. Interviewer should ask whether establishing a group has been considered but not been started yet. Interviewer should be familiar with WHO recommendations for non-pharmacological public health measures in Annex 1 of WHO preparedness plan[12]; details on measures to prevent influenza spread in communities can be also found in the WHO preparedness checklist. *EU preparedness:* *EU MS are obliged to inform, consult and coordinate measures with the other MS and the Commission using the EWRS and, where appropriate, other mechanisms (all WHO phases). MS share with the other MS and the Commission information regarding the effectiveness of recommended measures (WHO phase 3). MS consult the other MS and the Commission on any additional reduction of transmission measures planned. MS share information on effectiveness of measures on reduction of transmission and control (both WHO phase 4). MS report and consult on preparations for the next phase, especially as regards nationals of other MS and plans for assisting other EU nationals in third countries, including protection in situ and repatriation (WHO phase 4 and 5). Coordinate with the other MS and the Commission, additional reduction of transmission measures (WHO phase 5).*	
Findings:	

[11] http://www.who.int/csr/resources/publications/influenza/WO_CDS_CSR_GIP_2005_5.pdf
[12] http://www.who.int/csr/resources/publications/influenza/WO_CDS_CSR_GIP_2005_5.pdf

National antiviral strategy developed, including plans for procurement, stockpile and delivery to patients	**Key indicator: National antiviral strategy developed? Y/N** **If yes: Last month/year updated: _____** **Subsidiary indicators:** **Practical mechanism for delivery to patients agreed and in place?** **Therapeutic stockpile in place – percentage of population covered?** **Clinical protocols agreed and published?** **Public health stockpile in place (if part of strategy)?** **Practical mechanism for delivery for public health purposes (prophylaxis) agreed and in place?**
Instructions for responding: Have antivirals been stockpiled or is there a plan for stockpiling? If yes, how many courses of which antiviral have been /will be stockpiled and when, and what is the percentage of the population to be covered? How will antivirals be distributed (e.g. through pharmacies)? How will limited stocks of antivirals be used (e.g. for prophylactic during pandemic phases 4 and 5, for treatment during phase 6)? Who will receive antivirals? Will the population be educated about recommended use of antivirals and private stockpiling? Are systems planned/in place to monitor antiviral drug use and adverse events, as well as antiviral drug resistance? If country cannot produce or purchase antivirals, WHO may provide antivirals in early warning phase. In this situation, rapid deployment will be an issue. Interviewer should ask whether a strategy is under development, and if yes, when it is expected to be finalized.	
Findings:	

National pandemic vaccination strategy developed, including procurement, distribution and targeting of pandemic vaccines	**Key indicator: National pandemic vaccination strategy developed? Y/N** **If yes: Last month/year updated: _____** **Subsidiary indicators:** **Regulatory issues, liability, intellectual property rights addressed?** **Supply arrangements agreed and contract in place with supplier?** **Logistic and operational needs for implementation of H5N1-human-vaccines /pandemic vaccine strategy reviewed and agreed?**
Instructions for responding: If a vaccination strategy has been developed, the interviewer should ask whether H5N1 human ('pre-pandemic') vaccines are part of strategy. Interviewer should ask whether a strategy is under development, and if yes, when it is expected to be finalized. *Countries with vaccine manufacturing capacity:* Have defined how to ensure access to vaccines, and fair and effective distribution to target population; considered supporting initiatives to increase global production by contributing to global vaccine research and/or by strengthening infrastructure. *Countries without vaccine manufacturing capacity:* Have strategies been explored to allow access to vaccines through bilateral agreements with manufacturers or manufacturing countries?	
Findings:	

Pandemic preparedness regularly and systematically tested at all levels and across all sectors, including lessons learnt, report	**Key indicator: National level health sector exercise? Y/N** **If yes: Last month/year of exercise: ____**

published and fed back into planning	
Instructions for responding: Has the country participated in the simulation exercise 'Common Ground', conducted by the European Commission in November 2005? Country exercises should be specifically designed for a pandemic phase scenario and involve health and non-health sectors, and national and local levels (including cross-border exercises between neighboring regions of 2 countries). Specific exercises may be needed for different contingency plans. The interviewer should ask about the type and scope of the last national health sector exercise.	
Findings:	

Potential impact of measures for neighbouring countries and the EU discussed (interoperability of plans)	**Indicator: Joint work undertaken with neighbouring country/s on mutually relevant policy areas? Y/N** **If yes: Last month/year of joint work:** _____
Instructions for responding: Any measures that are not coordinated on a European level may cause concern in the population about differences in levels of health protection (e.g. clinical care, use of masks, antivirals, vaccines), potentially resulting in migration of patients across borders in expectation of better health care. Non-coordinated measures may also have an impact if countries have different policies on travel advice, exit/entry screening, quarantine, or border closures. Has this been addressed by the country? The interviewer should ask about the proportion of neighbouring countries contacted and give examples of joint work undertaken.	
Findings:	

Strategy developed how to provide services for foreign citizens present in your country during a pandemic, and for your citizens present during a pandemic in foreign countries.	**Indicator:** Documents available/known
Instructions for responding: Issues include transportation of citizens back to home country or provision of services in country of stay, organization of transport, organization of services (e.g. health facilities, availability and distribution of antivirals), potential inequity of services between host population and foreign citizens.	
Findings:	

Health system response

Health services are informed about national pandemic influenza policies including preparedness plan.	Indicator: Documents available/known
Instructions for responding: Information should include knowledge about the current pandemic situation and alert level. Health services should be aware that pandemic scenarios may go beyond the magnitude and severity of emergencies they had to manage up to now.	
Findings:	

Contingency plans developed how to manage caseload and maintain essential services.	**Indicator:** Documents available/known considering the revised pandemic phases
Instructions for responding: These contingency plans should be based on general health emergency plans, with specific attention to a pandemic situation. The WHO preparedness checklist provides details on health service facilities, personnel, supplies, dealing with excess mortality, other essential services, and recovery. Plans should include guidance on case-finding, clinical management, infection control, triaging, surge-capacity management and staffing. Includes implications of staff absence because of sickness, the need for staff to take time off to care for others, potentially increasing workload; databases for retired clinical staff or local doctors who may be asked to help; education and training needs for staff and volunteers. Interviewer may use examples of lacking availability of health-care workers and other essential workers, admission pressures in hospitals, or simply services overwhelmed with phone calls from the concerned population. Do hospitals have enough infection control and case management capacity including isolation units, intensive care beds, access to oxygen, mechanical ventilators, and personal protective equipment for personnel? Preparedness may also include establishing a group with representation from agencies in all affected health-care sectors, community groups that may provide alternative emergency accommodation for health-care facilities, and voluntary organizations that may provide health-care personnel. *EU preparedness:* *MS review, update and disseminate guidelines for clinical care, diagnostics, treatment, infection control and safe specimen handling (WHO phase 3). MS share guidelines for clinical management and infection control in health care (including long-term care facilities) (WHO phase 4). Implement guidelines for clinical management and infection control in health care (including long-term care facilities)(WHO phase 5). In consultation with other MS and the Commission, MS promote improvement of guidelines and (updated) model algorithms for the triage of influenza and non-influenza cases. In consultation with other MS and the Commission, MS promote development of guidelines on self-care (WHO phase 6).* **Key indicator** (see table for reporting).	
Findings:	

Regional/local health services able to cope with an influenza pandemic and continue to provide other essential health services	**Key indicator: Planning document issued to local health services which includes the nationally agreed parameters for which local services should plan (expected range of cases): Y/N** **If yes: Last month/year updated: _____** **Subsidiary indicators:** **Pharmaceutical and other material supply needs estimated at local level, arrangements to secure supply commenced?**
Instructions for responding:	
Findings:	

Authorities, responsibilities and pathways identified for command and control of health systems in the event of a pandemic.	**Indicator:** Documents available/known considering the revised pandemic phases
Instructions for responding: Who are the key decision-makers in the health system in a pandemic phase? How are they linked with the central command structure, e.g. in the Ministry of Health? What is the role of the interviewed person's facility in such a situation?	
Findings:	

Pharmaceutical and other material supply needs estimated; arrangements to secure supply commenced.	**Indicator:** Documents available/known considering the revised pandemic phases
Instructions for responding: This addresses needs apart from antivirals and vaccines, e.g. antibiotics to treat complications of influenza, antipyretics or other medical drugs and personal protection equipment. Are inventories of stocks available?	
Findings:	

Health-care workers trained in pandemic influenza response.	**Indicator:** Date(s) of training(s) in last 12 months
Instructions for responding: Trainings should be held regularly and in addition to annual classes/updates on seasonal influenza. Trainings should include identification of cases, treatment regimes, hospital infection control, routine laboratory biosafety, and safe specimen handling.	
Findings:	

Communication

National communication strategy developed and published	**Key indicator: National communication strategy? Y/N** **If yes: Last month/year updated: _____** **Subsidiary indicators:** **Spokesperson(s) known?** **Rapid clearance procedures known?** **Website(s) available/known?** **Media briefing materials available/known** **Capacity planned and tested for meeting expected domestic information demands for diverse audiences, including professional/technical groups, the news media and general public?** **Networks among key response stakeholders established, including risk communicators, non-health government departments, and professional and technical groups?** **News media with national plans familiarized, including preparedness activities and decision-making related to seasonal and pandemic influenza?** **Date(s) of media briefing(s) in last 12 months?**

Instructions for responding: Communication preparedness includes mechanisms of information sharing from the national to the local level, with regional (supranational) authorities and international agencies, designating a group responsible for coordinating the collection and dissemination of information related to the pandemic. The spokesperson(s) who would communicate on behalf of the government – or at least the health authorities – during a pandemic should be defined in advance, along with systems for rapid clearance of messages and coordination of messages across government. These systems should include clearance of messages and communication out of hours (weekends, evenings, holidays). Ready-to-use media briefing materials should be prepared, including a certain amount of basic information about the disease and the systems in place to respond to major outbreaks. Websites and other materials (e.g. leaflets, TV spots) about pandemic preparedness should be developed and available for rapid deployment. Interviewer may be familiar with national website(s) on pandemic preparedness or, if applicable, look at those with translator during the visit and ask to be shown other relevant materials that have been prepared. They should also discuss the arrangements for coping with the initial surge of public and media interest that the start of a pandemic would provoke. This discussion should include arrangements for rapidly responding to the media should the story break out of hours, arrangements for dealing with a surge of hits on the pandemic website and arrangements for coordinating messages across governments. Countries that are developing information leaflets or TV spots should be asked about their plans for delivering these to the public (e.g. is a delivery agreement in place with postal service for delivery of leaflets, are agreements in place with TV companies concerning TV spots). The interviewer should ask about details where the strategy is published (i.e. web addresses). If the strategy is under development, ask when it is expected to be finalized.

Strategic communication involves government, administrations and all other national and international organizations active in the response.
Professional information and guidance includes regular bulletins via established routes including websites; public health advice and clinical guidance directly to relevant groups and via websites.
Communication with the public and the media aims at clear, active engagement of the public, through regularly updated information and advice, media briefings and other measures of involvement.

In October 2005, a technical guidance document on '*Procedure for Communication to Member States, the Commission and the ECDC about highly pathogenic avian influenza events in humans*' has been agreed and published on the Europa website[13]. Interviewer should also be familiar with WHO guidance for outbreak communication and corresponding national contingency plans[14].

[13] http://europa.eu.int/comm/health/ph_threats/com/Influenza/influenza_key09_en.pdf
[14] www.who.int/csr/resources/publications/WHO_CDS_2005_28/en/index.html

EU preparedness: *MS work with other MS and the Commission to provide accurate messages. MS regularly update other partners, stakeholders and the public on the global epidemiological situation and disease characteristics (both WHO phase 3). MS share intended messages to the public and educational material with the other Member States, the Commission and the ECDC (WHO phase 4). MS share intended messages to the public and educational material with the other MS, the Commission and the ECDC (WHO phase 5).*
Findings:

Pandemic influenza, part B (local level):

B.1. Questions for public health decision-makers

Current situation: Human infections with highly pathogenic avian influenza of the type A/H5 have occurred in South East Asia. Transmission has been limited to close contact with animals without confirmed human-to-human spread. WHO is maintaining pandemic alert level 3 (the interviewer should have the WHO pandemic alert phases available to show to interviewed person). This situation implies that the following preparedness activities are in place:

What is the pandemic preparedness at national level?	**Indicator:** Knowledge about national preparedness plan (if existent), preparedness policies, national command and control structure, surveillance, laboratory capacity.
Instructions for responding: General knowledge of interviewed person about preparedness at national level.	
Findings:	

What is the local command and control structure to deal with potential A/H5 cases? How is it linked to a national structure?	**Indicator:** Documents available/known
Instructions for responding: Should cover a local emergency and/or pandemic coordinating committee, assistance by national and regional authorities in implementing interventions	
Findings:	

Do you have a local contingency plan?	**Indicator:** Documents available/known
Instructions for responding: Based on national plan/WHO; how much detail to address local situation? Clinical/public health/communication guidance included or additional documents prepared? Should cover all sectors (e.g. health, transport, education, private services), human and financial resources, surge capacity.	
Findings:	

Have you conducted any tabletop exercises how to deal with potential A/H5 cases?	**Indicator:** Dates of exercises in the last 12 months/# of sessions/# of officers trained
Instructions for responding: Should cover pre-established coordination between the health-care sector and relevant partner organizations (non-health sectors), decision-making procedures, chains of command? Exercise(s) based on local contingency plan? Conducted every year?	
Findings:	

Outbreak investigation capacity.	**Indicator:** Inventory of resources available
Instructions for responding: Inventory is an updated list of available experts who can provide expertise during outbreaks, including epidemiology, microbiology, coordination and management, logistics. List should include field of expertise, professional experience and contact details. Includes epidemiologic investigation to identify suspected human cases of a new influenza strain and their contacts, how cases became infected, to assess the clinical impact of the disease, and to determine the risk that infected persons or their	

environment may represent for others; investigations may identify a need for analytic studies – the WHO checklist addresses research issues during phase 2 and beyond, including evaluation of the response. Should include preparedness of the team – have they met and participated in simulation exercises? How many times in the last 12 months?
Findings:

Do you have local stockpiles of antivirals and guidance for their use?	**Indicator:** Amount and location
Instructions for responding: Are there plans to purchase antivirals at local or national level, a strategy for use at local or national level?	
Findings:	

Do you have guidance for accessibility and use of pandemic vaccines?	**Indicator:** Documents available/known
Instructions for responding: Are there plans to purchase vaccines at national level or local, a strategy for use at national or local level?	
Findings:	

Case scenario: During the last weeks, increased and sustained transmission of influenza A/H5 in several of your neighboring countries has forced WHO to raise the pandemic phase to 6. You have been without cases so far, but since a few days, increasing numbers of patients with symptoms suspect of influenza A/H5 have been admitted to hospitals in your area. The population has reacted with thousands of phone calls to local authorities and health services about risks and recommendations to protect their families and themselves. Immediate action is required to control the situation.

You are now in pandemic alert level phase 6, potentially with own A/H5 cases. What are important actions in this situation?	**Indicator:** Documents available/known
Instructions for responding: The interviewer should have the WHO pandemic alert phases available to show to interviewed person. Do not expect a comprehensive answer. This part has, as the previous ones, also an educational purpose. After documenting the response of the interviewed person, discuss the need for operational response teams across all relevant sectors, potential need for additional resources, implementation of surge-capacity arrangements and contingency plans for staff shortages in health-care facilities and in all other key activity sectors, potential management under national command and/or emergency powers, updates of policies and guidance, non-pharmacological public health measures, use of antivirals for treatment and prophylaxis, potential use of a prototype pandemic vaccine, intensification of public health messages to consider influenza in symptomatic patients and regarding self-protection, enhanced surveillance.	
Findings:	

What are the main strengths or weaknesses of your preparedness?	**Indicator:**
Instructions for responding:	
Findings:	

B.2. Questions for decision-makers in health care services

Current situation: Human infections with highly pathogenic avian influenza of the type A/H5 have occurred in South East Asia. Transmission has been limited to close contact with animals without confirmed human-to-human spread. WHO is maintaining pandemic phase 3. This situation implies that the following preparedness activities are in place:

What is the pandemic preparedness at national level?	**Indicator:** Knowledge about national preparedness plan (if existent), preparedness policies, national command and control structure, surveillance, laboratory capacity.
Instructions for responding: General knowledge of interviewed person about preparedness at national level.	
Findings:	

What is your role in the local command and control structure to deal with potential A/H5 cases? What is your own command and control structure?	**Indicator:** Documents available/known
Instructions for responding: Should cover a local emergency and/or pandemic coordinating committee, assistance by national and regional authorities in implementing interventions, where to report cases to at national level.	
Findings:	

What is your role in the local contingency plan (if existing)? Do you have your own contingency plan?	**Indicator:** Documents available/known
Instructions for responding: The contingency plan of the health services should include guidelines for infection control and address capacity to deal with influenza cases based on the assumptions in annex 3 (including clinical consultations, hospital admissions; need for isolation units, intensive care beds, access to oxygen, mechanical ventilators, personal protective equipment for personnel, vaccines, antivirals, antibiotics, surge-capacity management and staffing).	
Findings:	

Have you participated in any exercises how to deal with potential A/H5 cases?	**Indicator:** Dates of exercises in the last 12 months/# of sessions/# of officers trained
Instructions for responding: Should cover pre-established coordination between the health-care sector and relevant partner organizations (non-health sectors), decision-making procedures, chains of command. Exercise(s) based on local contingency plan? Conducted every year? Any specific training for health care workers apart from exercises?	
Findings:	

To which laboratory do you send specimens for influenza diagnosis, typing and sub-typing?	**Indicator:** Name and location of laboratory
Instructions for responding:	
Findings:	

Do you have access to antivirals and guidance for their use?	**Indicator:** Type, amount and location
Instructions for responding: Are there plans to purchase antivirals at local or national level, a strategy for use at local or national level? If yes, what type will be purchased (tablets, powder)?	
Findings:	

Do you have guidance for accessibility and use of pandemic vaccines?	**Indicator:** Documents available/known
Instructions for responding: Are there plans to purchase vaccines at national or local level, a strategy for use at national or local level?	
Findings:	

Case scenario: During the last weeks, increased and sustained transmission of Influenza A/H5 in several of your neighboring countries has forced WHO to raise the pandemic alert level to phase 6. You have been without cases so far, but since a few days increasing numbers of patients with symptoms suspect of Influenza A/H5 have been admitted to your and other hospitals in the area. The population has reacted with thousands of phone calls to local authorities and health services about risks and recommendations to protect their families and themselves. Immediate action is required to control the situation.

You are now in pandemic alert level phase 6, potentially with own A/H5 cases. What are important actions in this situation?	**Indicator:** Documents available/known
Instructions for responding: Discuss activation of contingency plans for response to overload of health facilities with influenza patients, identification of alternative strategies for case isolation and management, implementation of surge-capacity arrangements and contingency plans for staff and/or supply shortages in health-care facilities, updates of guidance (e.g. case definition), use of antivirals for treatment and prophylaxis, use of a prototype pandemic vaccine, intensification of public health messages to consider influenza in symptomatic patients and regarding self-protection, need to re-emphasize infection-control measures, distribution of stockpiles of personal protective equipment.	
Findings:	

What are the main strengths or weaknesses of your preparedness?	**Indicator:**
Instructions for responding:	
Findings:	

B.3. Questions for decision-makers in laboratories

Current situation: Human infections with highly pathogenic avian influenza of the type A/H5 have occurred in South East Asia. Transmission has been limited to close contact with animals without confirmed human-to-human spread. WHO is maintaining pandemic alert to level 3. This situation implies that the following preparedness activities are in place:

What is the pandemic preparedness at national level?	Indicator: Knowledge about national preparedness plan (if existent), preparedness policies, national command and control structure, surveillance, laboratory capacity.
Instructions for responding: General knowledge of interviewed person about preparedness at national level.	
Findings:	

What is your role in the local command and control structure to deal with potential A/H5 cases? What is your own command and control structure?	**Indicator:** Documents available/known
Instructions for responding:	
Findings:	

What is your role in the local contingency plan (if existing)? Do you have your own contingency plan?	**Indicator:** Documents available/known
Instructions for responding: Should cover resources needed, access to laboratory supplies and potentially diagnostic tests, surge-capacity management and staffing.	
Findings:	

Have you participated in any exercises how to deal with potential A/H5 cases?	**Indicator:** Dates of exercises in the last 12 months/# of sessions/# of officers trained
Instructions for responding: Should cover decision-making procedures, chains of command, biosafety guidelines, infection control protocols, surge capacity for personnel and supplies.	
Findings:	

Can you test for influenza?	**Indicator:** yes/no
Instructions for responding: If yes, which methods are used? What is your biosafety level? Where do you send specimens for confirmation? Have you been trained by the national influenza reference laboratory do detect a potential new influenza virus? Do you have a database for identified influenza viruses that you share with the national influenza reference laboratory? Do you participate in an external quality assurance programme? Testing includes routine influenza diagnosis, typing and subtyping; capacity may be only available in regional/national laboratory.	
Findings:	

If yes, do you have access to diagnostic tests for influenza?	**Indicator:** Number of tests available
Instructions for responding:	
Findings:	

If yes, do you have guidance for use of diagnostic tests for influenza?	**Indicator:** Documents available/known
Instructions for responding:	
Findings:	

If no, where do you send specimens for influenza testing?	**Indicator:** Name and location of laboratory
Instructions for responding:	
Findings:	

Do you have guidance for safe handling, storage and shipment of blood specimens from potential A/H5 cases?	**Indicator:** Documents available/known
Instructions for responding:	
Findings:	

Case scenario: During the last weeks, increased and sustained transmission of Influenza A/H5 in several of your neighboring countries has forced WHO to raise the pandemic alert level to phase 6. You have been without cases so far, but since a few days increasing numbers of patients with symptoms suspect of Influenza A/H5 have been admitted to hospitals in your area. The population has reacted with thousands of phone calls to local authorities and health services about risks and recommendations to protect their families and themselves. Immediate action is required to control the situation.

You are now in pandemic alert level phase 6, potentially with own A/H5 cases. What are important actions in this situation?	**Indicator:** Documents available/known
Instructions for responding: Discuss implementation of surge-capacity arrangements and contingency plans for staff shortages in health-care facilities, updates of guidance, need to re-emphasize infection-control measures, availability of personal protective equipment.	
Findings:	

What are the main strengths or weaknesses of your preparedness?	**Indicator:**
Instructions for responding:	
Findings:	

Avian influenza

Zoonosis preparedness	**Indicator:** Documents available/known
Instructions for responding: Who is responsible for preparedness and control of zoonoses at ministerial level? How are human health and veterinary sectors collaborating? Is there a joint database for surveillance combining human and animal data?	
Findings:	

National system in place for influenza surveillance in animals (including wild birds) which meets EU requirements	**Key indicator: National system for influenza surveillance in animals? Y/N**
Instructions for responding: Surveillance should be based on Food and Agriculture Organization (FAO) and World Organization of Animal Health (OIE) guidance. The surveillance system should be able to detect avian outbreaks in animals early in order to start control measures and reinforce prevention of transmission to humans. The interviewer should ask when last time data from this system were available to the public.	
Findings:	

National capacity for managing an outbreak of HPAI with human health implications, developed in collaboration between health and veterinary authorities	**Key indicator: Joint health and veterinary plan or complementary plans? Y/N** **If yes: Last month/year updated:** _____
Instructions for responding: The plan should contain standard operating procedures to control influenza outbreaks among animals. The role of the plan in pandemic preparedness planning should be defined and links with sectors involved in pandemic planning should be described (e.g. representation in national influenza committee). Which Ministry would lead the operations? Are algorithms available for investigation and management of potential human cases? Are antivirals readily available for rapid deployment and guidance for the use of antivirals in control of cases? Have hospitals been selected to manage cases? The plan(s) should address all aspects of protection of people living in the area and workers handling or killing affected animals, including who is responsible and who advises those working and those managing. Written materials should be available for those working in culling operations and those managing workers. Adequate personal protection equipment and supplies and mechanism for follow up of workers are needed. The interviewer should ask for details of where the plan is published (i.e. web addresses).	
Findings:	

Contingency plan(s) developed for communicating risk to the general public (some or no risk).	**Indicator:** Documents available/known
Instructions for responding: A communication and social mobilization strategy to inform and educate the public about risk behaviors and self-protection is an essential component. Information materials should be readily available and field tested.	
Findings:	

Access to at least one veterinary laboratory able to offer routine influenza diagnosis, typing and subtyping, but not necessarily strain identification.	**Indicator:** Name and location of laboratory
Instructions for responding: Does the laboratory have sufficient supplies, personnel and biosafety (e.g. if the number of daily incoming specimens increases to 4 times the normal amount; is there surge capacity personnel from other parts of the laboratory)? Are there different algorithms for dealing with a surge in samples? Does it collaborate with the human influenza laboratories in the country? Does it participate in an external quality assurance programme? Is it linked to an international network such as the OIE/FAO Network of expertise on avian influenza (OFFLU)? Does it collaborate with laboratories outside of the country? Have specimens been sent for confirmation in an international reference laboratory? Have peripheral laboratories been equipped and trained in testing of potentially highly pathogenic influenza (e.g. using Real-Time PCR)? **Key indicator** (see table for reporting).	
Findings:	

Outbreak investigation capacity for avian influenza in animals (in particular in bird populations) available.	**Indicator:** Inventory of resources available
Instructions for responding: Inventory is an updated list of available experts in animal and human health who can provide expertise during outbreaks, including epidemiology, microbiology, coordination and management, logistics. List should include field of expertise, professional experience and contact details. Includes epidemiologic investigation to identify how suspected animal cases became infected, to assess the clinical impact of the disease, and to determine the risk that infected animals or their environment may represent for humans; investigations may identify a need for analytic studies. **Key indicator** (see table for reporting).	
Findings:	

Exercises for avian influenza in animals (in particular in bird populations) conducted and results used to improve planning.	**Indicator:** Date(s) of exercise(s) in the last 12 months/# of sessions/# of officers trained/report(s) available/results used
Instructions for responding: Exercises should be designed specifically for animal outbreaks, but cover protection of people living in the area and workers handling or killing affected animals. Exercises should involve national and peripheral levels (including cross-border exercises between neighboring regions of 2 countries). **Key indicator** (see table for reporting).	
Findings:	

Annex 1: National pandemic plan check list

Preparedness plan (recommended components; if no plan, use for planning purposes)

Checklist of essential plan components

Component	Check	Findings	For more details see specific section of this Tool
Objectives of the plan	☐		
International preparedness: pandemic phases (Annex 1) and mechanism to declare a pandemic	☐		
Scenarios of the impact of a pandemic and interventions developed (modelling[15])	☐		'Prevention and reduction of transmission'
Roles and responsibilities of the main organisations contributing to the response (including member list of National Influenza Committee)	☐		'Prevention and reduction of transmission'
Surveillance and information gathering	☐		'Monitoring and assessment'
Public health response: Non-pharmacological public health measures (e.g. measures to reduce risk that cases transmit infection, to increase social distance, or for persons entering or exiting an infected area)	☐		'Prevention and reduction of transmission '
Public health response: Antiviral agents strategy	☐		'Prevention and reduction of transmission '
Public health response: Immunisation strategy	☐		'Prevention and reduction of transmission '
Health service response: Management of patients	☐		'Health system response'.
Health service response: Infection control	☐		'Health system response'
Health service response: Organisation of health services	☐		'Health system response'
Civil emergency response	☐		'Prevention and reduction of transmission '
Workforce, education and training	☐		'Prevention and reduction of transmission '
Communication: Strategic communications	☐		'Communication'
Communication: Professional information and guidance	☐		'Communication'
Communication: Communications with the public and the media	☐		'Communication'
Phased response[16]	☐		

[15] See Annex 3 for planning assumptions

[16] May include trigger (as defined by WHO preparedness plan, current phase announced by WHO), planning assumptions, priorities, main capacity required, and actions.

Plan to recovery[17]	☐		

[17] Including recovery of essential services, determination of need for governmental/EU financial support, and identification of individuals responsible to give social and psychological support to affected families and companies.

Annex 2: New WHO pandemic phases

	Pandemic phases	Public health goals
	Interpandemic period	
1	No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals the risk of human infection or disease is considered to be low	Strengthen influenza pandemic preparedness at the global, regional, national and subnational levels.
2	No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.	Minimize the risk of transmission to humans; detect and report such transmission rapidly if it occurs.
	Pandemic alert period	
3	Human infection(s) with a new subtype, but no human to human spread, or at most rare instances of spread to a close contact.	Ensure rapid characterization of the new virus subtype and early detection, notification and response to additional cases.
4	Small cluster(s) with limited human to human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.	Contain the new virus within limited foci or delay spread to gain time to implement preparedness measures, including vaccine development.
5	Large cluster(s) but human-to-human spread still localized, suggesting that the new virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).	Maximize efforts to contain or delay spread, to possibly avert a pandemic, and to gain time to implement pandemic response measures.
	Pandemic period	
6	Pandemic: increased and sustained transmission in general population	Minimize the impact of the pandemic.
	Post-pandemic period	
	Post-pandemic period: return to inter-pandemic period	Return to inter-pandemic period

Annex 3: European Union Alert levels in pandemic phase 6

One – no confirmed human cases infected with the pandemic virus in any European Union Member State;
Two – one or more confirmed human cases infected with the pandemic virus in any European Union Member State;
Three – a confirmed outbreak (transmission) with the pandemic virus in any European Union Member State;
Four – widespread transmission in European Union Member States

Annex 4: Planning assumptions[18,19]

Attack rate: this is the proportion of the population that develop clinical influenza during a pandemic. In the absence of any intervention, planners assume that over a period of 9 to 15 weeks some **30%** of the population will become ill. Attack rates, and severity of illness, are likely to vary between age groups, but as neither children nor adults are likely to have immunity to the new virus, for planning purposes a uniform attack rate, more serious illness and higher mortality rates than normal 'seasonal' influenza must be assumed across all age groups.
Case fatality rate: the proportion of ill people that would die due to influenza. Most national plans base their assumptions on a percentage of **0.37%** overall case fatality rate over a pandemic period.
Clinical consultations: **50%** of the ill people are expected to seek general practitioner or
outpatient medical care.
Hospital admissions: for acute respiratory and related conditions, influenza-like cases are likely to represent **1%** of clinical cases.
Rate of Intensive Care: it is expected that **15%** of the patients hospitalised for influenza-like illness will need intensive care, and **50%** of these may need mechanical ventilators.
Work absenteeism: for planning purposes, it should be assumed that a cumulative total of **30%** of the work force will take five to eight working days off over a three-month period. Influenza spread will be accelerated in schools and other closed communities leading to a potential need to close schools. This, combined with travel disruption and the need for workers to provide care for

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[18] Communication from the Commission to the Council, the European Parliament, the European economic and social committee and the committee of the regions on pandemic influenza preparedness and response planning in the European Community, at
http://europa.eu.int/eur-lex/lex/LexUriServ/site/en/com/2005/com2005_0607en01.pdf
[19] A more detailed set of figures based on figures close to these assumptions is included in the national pandemic plan (October 2005) of the UK Department of Health, Section 4.3, pages 19 to 32, available at http://www.dh.gov.uk/assetRoot/04/12/17/44/04121744.pdf . These are useful figures, **however, they should be used cautiously at the local level because they may underestimate the intensity of local epidemics.**

family members and others, will exacerbate absenteeism.