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Introduction

Background

For several years, European countries have invested in planning, preparation and practice for the next influenza pandemic, supported by the WHO Regional Office for Europe (WHO/Europe), the European Centre for Disease Prevention and Control (ECDC) and the European Commission (EC). In 2009, the pandemic (H1N1) 2009 emerged and emphasized the need for continuous preparedness planning to further strengthen national and international preparedness and response to a pandemic.

The range of sectors needing to be covered in pandemic preparedness planning is considerable making it a complex task. Initially most activities were focused in ministries of health and public health institutes. More recently it has been appreciated that preparation has to extend across non-health sectors, to involve business and civil society, to look at how Member States will work together and to extend down from the national to regional and local levels including front-line services. Finally there is a need to regularly assess pandemic preparedness, regularly monitor the progress made in preparedness planning, including identifying the areas of pandemic preparedness that still need to be addressed.

Purpose

These indicators have been developed to assist Member States assess their pandemic preparedness, identify gaps, prioritize future investment and monitor progress in those areas which, by international consensus, are deemed the most important. They can be used by Member States as part of a self-assessment process^{1 2}.

Development of the indicators

The pandemic preparedness assessment indicators in this document are based on the WHO Checklist for Influenza Pandemic Preparedness Planning³, the WHO Guidance on Pandemic Influenza Preparedness and Response⁴ and the EC Pandemic Communication.⁵ For consistency, the indicators builds on the Pandemic Influenza Self Assessment Tool developed by ECDC and used by the Centre, WHO/Europe and the EC during country visits to help deliver self-assessments of preparedness among European Union (EU) Member States and European Economic Area countries as well as South-Eastern European⁶ countries in the period 2005-2008⁷.

¹ http://ecdc.europa.eu/en/healthtopics/Documents/0609_Pandemic_Influenza_Assessment_Tool.pdf

² <http://www.euro.who.int/Document/E92613.pdf>

³ http://www.who.int/entity/csr/resources/publications/influenza/WHO_CDS_CSR_GIP_2005_4/en/index.html

⁴ <http://www.who.int/entity/csr/disease/influenza/PIPGuidance09.pdf>

⁵ http://eur-lex.europa.eu/LexUriServ/site/en/com/2005/com2005_0607en01.pdf

⁶ Albania, Bosnia and Herzegovina, Croatia, Montenegro, Republic of Moldova, Serbia, the former Yugoslav Republic of Macedonia and Turkey

⁷ <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=3335>

The indicators have been developed by a group of experts from European countries, ECDC and WHO/Europe, experienced in pandemic planning and preparedness. They have also been reviewed and approved in 2008 by the Influenza Section of the EU Health Security Committee and provided to all countries in the WHO European Region for consultation.

Use of this document

Preparing for a pandemic is a complex process and having an agreed and validated set of indicators is crucially important for assessing the level of preparedness. This document contains 20 goals for pandemic influenza preparedness planning, in the areas of seasonal influenza, pandemic influenza and avian influenza. Each goal is assigned a 'key indicator', i.e. an activity or output which, if achieved, means that good progress is probably being made towards achievement of the ultimate goal.

For each key indicator, there are three answer options, that is, "yes", "partial" or "no" depending on the completeness of the area of pandemic preparedness represented by the key indicator. To determine the current status of a certain area of pandemic preparedness, Member States may take into account the 'second tier' indicators which guide Member States on what to consider in that specific area of pandemic preparedness before determining the current status of preparedness.

The pandemic preparedness self-assessment indicators can be used in different ways according to the purpose the user has in mind.

1. The indicators can be used as tool when preparing for a national self-assessment with or without an external group (the former is how earlier versions were developed and used by ECDC and WHO/Europe).
2. The key indicators can be used for sharing information on progress with WHO/Europe and ECDC for aggregated regional overviews and support.
3. The second tier indicators can be used as a way of determining whether or not a key indicator has been reached. But also they can be used as planning guide like the WHO checklist for Influenza Pandemic Preparedness Planning

Of course the pandemic preparedness self-assessment tool or the key indicators can be used with more than one purpose in mind.

Limitations

It should be noted that indicators are just that: Indicators that an activity or output is being achieved. As such they are a guide, to inform planning. They can not alone give a comprehensive account of pandemic preparedness.

Furthermore, while these indicators and the tool have been developed to represent those areas internationally agreed as the most important, Member States themselves must decide the extent to which preparedness planning is appropriate for their country and circumstances. It may be that certain second tier indicators may not be applicable to a particular country (e.g. because of the administrative structure of the country). In some cases, Member States may experience that existing generic guidance, laws or documents supersede the need to make pandemic specific guidance, laws etc.

The indicators should be considered as a list of things to consider when assessing or planning pandemic preparedness in a country. It is not a set of recommendations but rather a guiding document.

Potential users

It is proposed that the person (or persons) responsible for the national pandemic planning and preparedness ensures that each component is filled in by the relevant persons across the different government sectors and at the different administrative levels.

Glossary

A glossary is placed in the back of the document as an aid to understand the words and concepts used throughout this document. The glossary is arranged according to the key indicators

A developing process

Finally it must be appreciated that pandemic preparedness remains an area where there are constant developments. The indicators used by ECDC and WHO/Europe have developed over time. Both the key and second tier indicators should not be seen as '*set in stone*'. They will undoubtedly improve, change and develop over time and with experience, hence the views of those who use them are crucial. So please provide feedback on the indicators or any other questions related to pandemic preparedness to both influenza@euro.who.int and influenza@ecdc.europa.eu

Acknowledgements

WHO/Europe and ECDC wish to thank the experts involved in developing the tool for their efforts throughout the process and at the same time acknowledge the role of the Member States in reviewing and improving the indicators.

Seasonal Influenza

Surveillance

	Goal	Key indicator	Current status
1.	Epidemiological and virological surveillance system(s) in place for seasonal influenza	National surveillance data published throughout the influenza season including information on geographic distribution	<input type="checkbox"/> Yes <input type="checkbox"/> Partial <input type="checkbox"/> No

To determine “current status” consider the points listed below (1.1-1.6)

Has progress been made in this field within the last 12 months?

- Yes
 No

If yes, indicate in which areas progress has been made (tick boxes below if progress was made)

- 1.1 Clinical surveillance for seasonal influenza in place
- 1.2 Virological surveillance for seasonal influenza in place
- 1.3 Surveillance data on seasonal influenza published
- 1.4 Data submitted regularly to WHO EURO (Euroflu) or ECDC (TESSy)
- 1.5 Hospital admission data available (total admissions)
- 1.6 National crude mortality data for deaths due to any cause available

Virology

	Goal	Key indicator	Current status
2.	Laboratory capacity able to provide timely, high quality, validated routine influenza diagnostic laboratory support, with committed budget to facilitate this work	Laboratory capacity to perform a) virus isolation; b) influenza typing (A and B); c) influenza subtyping	<input type="checkbox"/> Yes <input type="checkbox"/> Partial <input type="checkbox"/> No

To determine “current status” consider the points listed below (2.1-2.5)

Has progress been made in this field within the last 12 months?

- Yes
No

If yes, indicate in which areas progress has been made (tick boxes below if progress was made)

2.1 Designated laboratory with the capability for influenza typing and subtyping

2.2 Designated laboratory having:

- Secure and dedicated budget
- Plans for provision of surge capacity (including staff training)
- Operational plans covering a major epidemic/pandemic (including which services will be available at the height of the outbreak)
- Qualified and trained staff
- Plan for how diagnostic capacities will be used in a pandemic

2.3 Designated laboratory providing quality influenza virology services to type and subtype circulating seasonal influenza viruses and other influenza subtypes which may present a public health risk (H1, H3, H5, H7 (H2)

2.4 Designated laboratory having access to antiviral susceptibility testing (Neuraminidase and M2 Inhibitors)

2.5 If there is an influenza laboratory network in the country, it is coordinated by the national reference laboratory

Seasonal influenza vaccination programme

	Goal	Key indicator	Current status
3.	National vaccine uptake achieving WHO targets [currently >75% uptake in over 65s]	Strategies in place to obtain seasonal influenza vaccination uptake in accordance with WHO targets?	<input type="checkbox"/> Yes <input type="checkbox"/> Partial <input type="checkbox"/> No

To determine “current status” consider the points listed below (3.1-3.6)

Has progress been made in this field within the last 12 months?

- Yes
 No

If yes, indicate in which areas progress has been made (tick boxes below if progress was made)

3.1 National strategy in place to increase seasonal influenza vaccine uptake

3.2 WHO targets for seasonal influenza vaccine uptake reflected in national policy documents

3.3 National policy for seasonal influenza vaccination include identified medical risk groups

3.4 Seasonal influenza vaccination for occupational groups addressed in national policy documents

3.5 Vaccine uptake monitored and data on seasonal influenza vaccine uptake for persons over 65 available by April of each year

3.6 Vaccine uptake targets available for different target groups (risk groups and occupational groups)

Pandemic Influenza

Preparing for an emergency: National planning and co-ordination

	Goal	Key indicator	Current status
4.	National framework in place for pandemic preparations across all sectors (for health also see Goal 6)	Written national cross-sectoral crisis management plan (influenza pandemic-specific, or generic <i>if</i> applicable to an influenza pandemic) available	<input type="checkbox"/> Yes <input type="checkbox"/> Partial <input type="checkbox"/> No

To determine “current status” consider the points listed below (4.1-4.5)

Has progress been made in this field within the last 12 months?

- Yes
 No

If yes, indicate in which areas progress has been made (tick boxes below if progress was made)

4.1 High level cross-sector planning coordination, including political endorsement

4.2 Essential services identified and agreed upon, and plans to retain continuity of essential services in a pandemic included in the cross sectoral plan (see examples of essential services below)

- Health care services
- Funeral services
- Fuel, energy and power
- Public Security (e.g. police, fire fighters)
- Communications (e.g. phone, the internet)
- Water and food supplies
- Critical national infrastructure

4.3 Business continuity plans, appropriate for a pandemic, existing for maintenance of the identified essential services

4.4 Planning assumptions (i.e. the level of impact national plans are to be based on) available

4.5 Resources identified for planning and implementation of the operational plans

Health sector plan

	Goal	Key indicator	Current status
5.	Health sector pandemic plan consistent with international (e.g. WHO and EU) guidance publicly available	National health sector pandemic influenza plan available	<input type="checkbox"/> Yes <input type="checkbox"/> Partial <input type="checkbox"/> No

To determine “current status” consider the points listed below (5.1-5.5)

Has progress been made in this field within the last 12 months?

- Yes
 No

If yes, indicate in which areas progress has been made (tick boxes below if progress was made)

5.1 Multidisciplinary involvement in health sector plan development in place

The list below is to be considered as an example rather than an exhaustive list:

- Ministry of Health
- Representatives of primary care
- Representatives of secondary care
- Institution of highest administrative level responsible for pandemic preparedness
- Regulatory agency medicines
- Emergency preparedness
- Ministry of Finance
- Civil protection

5.2 Health sector plan considering phases as described in the WHO Global Influenza Preparedness Plan

5.3. Ethical framework for implementation of the health sector plan established

5.4 Legal framework for implementation of the health sector plan established

5.5 Health sector plan subject to regular review

Command and control

	Goal	Key indicator	Current status
6.	Roles and responsibilities identified and command and control structure in place across all sectors for reducing the impact of an influenza pandemic	Command and control structure available (cross-sectoral and health services)	<input type="checkbox"/> Yes <input type="checkbox"/> Partial <input type="checkbox"/> No

To determine “current status” consider the points listed below (6.1-6.2)

Has progress been made in this field within the last 12 months?

- Yes
- No

If yes, indicate in which areas progress has been made (tick boxes below if progress was made)

6.1 Cross-sectoral crisis management structure applicable to an influenza pandemic established

6.2 Source(s) of expert advice to advise the crisis management structure identified

Monitoring essential services in the health care and other sectors

	Goal	Key indicator	Current status
7.	Monitoring: Ability to monitor functioning of essential services, including the health sector, in order to be able to reallocate resources	Ability to monitor the impact on health and other services during Phase 6 through a provisional national situation reporting template	<input type="checkbox"/> Yes <input type="checkbox"/> Partial <input type="checkbox"/> No

To determine “current status” consider the points listed below (7.1-7.2)

Has progress been made in this field within the last 12 months?

- Yes
No

If yes, indicate in which areas progress has been made (tick boxes below if progress was made)

7.1 Mechanism available for real time monitoring of health care capacities during a pandemic

Examples of health care capacities to be monitored during a pandemic:

- Available beds
- Available staff
- Stock levels of pharmaceuticals
- Availability of other ‘hard ware’, such as ventilators
- Availability of PPE and consumables

7.2 Mechanism for signalling problems in capacity in non- health sectors_available

International Interoperability

	Goal	Key indicator	Current status
8.	Potential impact of measures discussed with relevant contacts in neighbouring and other countries and international agencies (WHO/EU)	Joint work undertaken with neighbouring country(ies) on mutually relevant policy areas	<input type="checkbox"/> Yes <input type="checkbox"/> Partial <input type="checkbox"/> No

To determine “current status” consider the points listed below (8.1-8.5)

Has progress been made in this field within the last 12 months?

- Yes
No

If yes, indicate in which areas progress has been made (tick boxes below if progress was made)

8.1 National pandemic plan takes the International Health Regulations (2005) into account

8.2 Policies/provisional plans of neighbouring countries are known

For example policies/plans in neighbouring countries on:

- Border controls
- International travel restrictions
- Care of nationals abroad
- School closures
- Antiviral prophylaxis and treatment
- Vaccination
- Healthcare
- Trigger points for action
- Communications

8.3 Policies of neighbouring and other relevant countries have been taken into account in the national plan

8.4 Effective communication strategies established between bordering regions/countries and international organizations for communication before and during a pandemic

8.5 National pandemic plan available in international languages

Pandemic exercises

	Goal	Key indicator	Current status
9.	Pandemic preparedness regularly and systematically tested at all levels and across all sectors, reports published and lessons learned fed back into planning	National level pandemic exercise taken place	<input type="checkbox"/> Yes <input type="checkbox"/> Partial <input type="checkbox"/> No

To determine “current status” consider the points listed below (9.1-9.6)

Has progress been made in this field within the last 12 months?

- Yes
No

If yes, indicate in which areas progress has been made (tick boxes below if progress was made)

9.1 Systematic testing of all key elements of the preparedness plan planned or carried out

9.2 Desk top /real time command post exercises held

For example for the following areas of pandemic preparedness:

- National command and control structure
- National health command & control structure
- Regional/local primary and secondary care command & control structure, including front line staff

9.3 Cross-sectoral exercises held for phases 5 and 6

9.4 National exercises includes international institutions and relevant cross border elements

9.5 Lessons learned from exercises and the pandemic (H1N1) 2009 identified and incorporated in revised plans

9.6 Country participated in international exercises

Regional and local planning and co-ordination

	Goal	Key indicator	Current status
10.	Regional/local cross-sectoral planning and co-ordination of pandemic preparedness	Regional/local planning and co-ordination structure established	<input type="checkbox"/> Yes <input type="checkbox"/> Partial <input type="checkbox"/> No

To determine “current status” consider the points listed below (10.1-10.3)

Has progress been made in this field within the last 12 months?

- Yes
- No

If yes, indicate in which areas progress has been made (tick boxes below if progress was made)

10.1 National framework for regional/local planning and coordination identified and established

10.2 Regional/local planning and coordination arrangements audited against the national framework

10.3 Communication channels between national and regional/local level defined

Regional and local health services

	Goal	Key indicator	Current status
11.	Regional/local health services able to cope with an influenza pandemic and continue to provide other essential services	Local health care continuity plans developed for primary and secondary care, based on national guidance (space for differences in different places)	<input type="checkbox"/> Yes <input type="checkbox"/> Partial <input type="checkbox"/> No

To determine “current status” consider the points listed below (11.1-11.7)

Has progress been made in this field within the last 12 months?

- Yes
 No

If yes, indicate in which areas progress has been made (tick boxes below if progress was made)

11.1 Regional/local pandemic plans based on the national pandemic preparedness framework developed

11.2 Focal points for regional/local pandemic influenza planning in the health sector established, between whom there is regular communication

11.3 Local operational pandemic plans considers primary health care

Examples of areas to consider:

- Rapid access to antivirals
- Training needs
- Procurement of supplies (everything you will need lots of)
- Payment for supplies (everything you will need lots of)
- Infection control

11.4 Secondary health care services have planned for the impact of a pandemic on health care continuity

Examples of areas to consider in planning:

- Expected range of cases
- Percentage of staff sick
- Staff training needs and surge capacity
- Rapid access to antivirals
- Ambulance service
- Primary/secondary care interface
- Secondary care
- Excess deaths
- Options for mutual aid (with other regions)
- Private sector involvement

- Social care (home care, nursing homes)
- Use of voluntary sector
- Engagement with stakeholders
- Procurement and payment for supplies
- Maintenance of essential services

11.5 Arrangements in place to consider implications for management of patients with non-influenza related acute and chronic diseases (e.g. maternity care, trauma wards, cancer patients etc.) □

11.6 Local health care plans audited against the national framework □

11.7 Assessment of the operational needs of the health services during a pandemic undertaken, including clinical and diagnostic services, pharmaceutical and other supplies □

Examples of issues to consider for each health service:

- Clinical services
- Diagnostic services
- Pharmaceutical supplies
- Need for stockpiling
- Need for other consumables (protective equipment)

Pandemic surveillance and outbreak investigation

	Goal	Key indicator	Current status
12.	Pandemic surveillance and outbreak investigation able to detect initial cases and provide the surveillance information necessary to inform action at each pandemic phase	Operational pandemic surveillance plan available that conforms to WHO/ECDC specifications as they become available	<input type="checkbox"/> Yes <input type="checkbox"/> Partial <input type="checkbox"/> No

To determine “current status” consider the points listed below (12.1-12.7)

Has progress been made in this field within the last 12 months?

- Yes
 No

If yes, indicate in which areas progress has been made (tick boxes below if progress was made)

12.1 Surveillance objectives and strategies identified for each of the WHO pandemic phases

12.2 Protocols in place for the investigation of suspect early cases/clusters

For example covering:

- Raising awareness
- Recognition/detection of early cases
- Investigation
- Confirmation
- Reporting (including international reporting)

12.3 Minimum specific data requirements defined for each phase to monitor spread, refine projections, inform responses, monitor impact and monitor uptake and effectiveness of interventions

12.4 Pandemic surveillance plan covers data provision and collection (i.e. the systems and the persons responsible for collecting data from primary and secondary health care, mortuaries etc) and responsibilities and arrangements are clear

12.5 Pandemic surveillance plan cover data management arrangements (who is responsible for receiving data, storage, security, privacy, access, forwarding to higher level) for use in Phases 4-6

12.6 Provisional triggers as to when to switch to pandemic surveillance agreed and defined in the plan

12.7 Arrangements in place for information analysis (data analysis, recommendations, reports)

Case management and treatment

	Goal	Key indicator	Current status
13.	National guidance prepared for management of influenza and non-influenza patients during an influenza pandemic	Provisional pandemic influenza clinical management and infection control guidelines prepared	<input type="checkbox"/> Yes <input type="checkbox"/> Partial <input type="checkbox"/> No

To determine “current status” consider the points listed below (13.1-13.5)

Has progress been made in this field within the last 12 months?

- Yes
 No

If yes, indicate in which areas progress has been made (tick boxes below if progress was made)

13.1 Provisional clinical guidelines for managing patients with pandemic influenza developed by a multi-professional group

13.2 Treatment algorithms developed

13.3 Infection control guidelines available which are applicable to a wide range of health care settings

13.4 Infection control guidelines tested for feasibility and acceptability

13.5 Arrangements in place for rapid review of national patient management guidelines in the light of emerging information and availability of resources

Non-pharmacological public health measures: Awareness

	Goal	Key indicator	Current status
14.	Public clear about the strategy on personal non-pharmacological public health measures (e.g. respiratory hygiene, self isolation, masks)	Public education materials prepared and tested	<input type="checkbox"/> Yes <input type="checkbox"/> Partial <input type="checkbox"/> No

To determine “current status” consider the points listed below (14.1-14.3)

Has progress been made in this field within the last 12 months?

- Yes
 No

If yes, indicate in which areas progress has been made (tick boxes below if progress was made)

14.1 Communication strategy for non-pharmacological protective measures for the general public developed

14.2 Key messages about non-pharmacological interventions for the general public produced and distribution channels defined

For example key messages about:

- Respiratory hygiene
- Voluntary quarantine
- Use of masks

14.3 Key messages to the public about non-pharmacological interventions tested (e.g. respiratory hygiene, self isolation) and effectiveness evaluated

Non-pharmacological public health measures: Strategies

	Goal	Key indicator	Current status
15.	Strategy for non-pharmacological public health measures (travel, mass gatherings, school closures etc) developed	Options for use of non-pharmacological public health measures investigated and provisional plans to implement them in place	<input type="checkbox"/> Yes <input type="checkbox"/> Partial <input type="checkbox"/> No

To determine “current status” consider the points listed below (15.1-15.4)

Has progress been made in this field within the last 12 months?

- Yes
 No

If yes, indicate in which areas progress has been made (tick boxes below if progress was made)

15.1 Strategies for the use of community non-pharmacological public health measures developed

For example:

- Respiratory hygiene
- Closure of public places (e.g. schools)
- Voluntary quarantine
- Respiratory hygiene
- Use of masks
- Other interventions (e.g. border closure)

15.2 Repercussions of implementing public health measures reviewed, costs estimated and resources identified

15.3 Implementation plans for non-pharmacological public health measures prepared

15.4 Arrangements in place for rapid review of public health policies in the light of emerging information and availability of resources

Antiviral strategy

	Goal	Key indicator	Current status
16.	National antiviral strategy developed, including plans for use, procurement, stockpile and delivery to patients	National antiviral strategy available	<input type="checkbox"/> Yes <input type="checkbox"/> Partial <input type="checkbox"/> No

To determine “current status” consider the points listed below (16.1-16.5)

Has progress been made in this field within the last 12 months?

- Yes
 No

If yes, indicate in which areas progress has been made (tick boxes below if progress was made)

16.1 Strategy for the use of antivirals (treatment/prophylaxis/principles for prioritization) agreed

16.2 Extent of – and funding for - a national stockpile of antivirals agreed

16.3 Practical arrangements for procurement, storage, security, release, and rapid patient access for antivirals developed, taking into account regulatory and liability issues

16.4 Arrangements in place to monitor use and speed of reduction of stockpiles, and to modify strategy for use if need arises

16.5 Agreement on whether to conduct studies to assess effectiveness, antiviral resistance and adverse reactions, or, if not, an arrangement for access to information to inform review of strategies

Vaccination strategy

	Goal	Key indicator	Current status
17.	National pandemic vaccination strategy developed, including policies for use, and arrangements for procurement, distribution and vaccination	National pandemic vaccination strategy developed	<input type="checkbox"/> Yes <input type="checkbox"/> Partial <input type="checkbox"/> No

To determine “current status” consider the points listed below (17.1-17.4)

Has progress been made in this field within the last 12 months?

- Yes
 No

If yes, indicate in which areas progress has been made (tick boxes below if progress was made)

17.1 Provisional strategy for use of a pandemic vaccine agreed

For example use for the following groups:

- Health care workers
- Risk groups for complications (i.e. underlying diseases, age groups)
- Main identified essential services (excluding HCW)

17.2 Practical arrangements for procurement, storage, security, distribution of pandemic vaccine developed, taking into account regulatory and liability issues

17.3 Operational plans in place for implementation of a targeted/mass vaccination campaign, including should a two dose schedule be required

17.4 Arrangements in place to monitor vaccine uptake, monitor and investigate adverse reactions, and assess effectiveness

Communication to the public and media

	Goal	Key indicator	Current status
18.	Effective communications strategy suitable for delivering the right message before and during a pandemic	Communication infrastructure developed and available	<input type="checkbox"/> Yes <input type="checkbox"/> Partial <input type="checkbox"/> No

To determine “current status” consider the points listed below (18.1-18.4)

Has progress been made in this field within the last 12 months?

- Yes
 No

If yes, indicate in which areas progress has been made (tick boxes below if progress was made)

18.1 Communication infrastructure and protocols in place

For example:

- Cross-Government lead and co-ordination arrangements
- Staffing needs, including for 24/7 coverage, and training
- Key contact list maintained
- Technical infrastructure (web, telephones, telephone hotline, IT) and support
- Contracts in place for rapid production and distribution of information when needed
- Mechanism for rapid clearance of messages
- Mechanism to reach minority populations
- Spokesperson identified and trained and public trust build up

Public communications:

18.2 General information for the public covering the different pandemic phases prepared and tested

For example

- Informed by own and others public opinion research
- Materials in key languages (also minority languages)
- Arrangements in place for rapid clearance
- Easily accessible

Media communications:

18.3 Ongoing pandemic preparedness activities communicated to the media

18.4 Media communications strategy developed for the pandemic including media briefings and regular updating of information

Communications for health care workers and other occupations

	Goal	Key indicator	Current status
19.	Communication for health care workers in place	Infrastructure in place for communication with health care workers and other occupation groups	<input type="checkbox"/> Yes <input type="checkbox"/> Partial <input type="checkbox"/> No

To determine “current status” consider the points listed below (19.1-19.3)

Has progress been made in this field within the last 12 months?

- Yes
 No

If yes, indicate in which areas progress has been made (tick boxes below if progress was made)

19.1 Infrastructure in place for rapid communications with health care workers

For example:

- Spokesperson identified
- Website available
- Email groups established
- Key contact points identified

19.2 Information about influenza pandemic, including phase specific infection risk and self protection measures, prepared for health care workers

19.3 Information about influenza pandemic, including phase specific infection risk and self protection measures, prepared for those with face to face contact with the public through their work

Avian Influenza

Outbreak of avian influenza with human implications

	Goal	Key indicator	Current status
20.	Capacity for detecting and managing an outbreak of High Pathogenic Avian Influenza with human health implications developed in collaboration between health and veterinary authorities	Avian influenza contingency plans available (joint health and veterinary plan or complementary plans)	<input type="checkbox"/> Yes <input type="checkbox"/> Partial <input type="checkbox"/> No

To determine “current status” consider the points listed below (20.1-20.5)

Has progress been made in this field within the last 12 months?

- Yes
No

If yes, indicate in which areas progress has been made (tick boxes below if progress was made)

20.1 Integrated response to avian influenza developed and agreed by animal and health sectors

20.2 National system in place for influenza surveillance in birds (including wild birds) which meets international requirements

20.3 Multiprofessional response team(s) for avian influenza outbreaks identified and trained

20.4 Practical plans for management of those occupationally exposed during an AI incident developed and tested

20.5 Exercises undertaken for avian influenza outbreaks

Glossary

- 1.1 Clinical surveillance: Reports of new cases of influenza-like illness (ILI) and/or acute respiratory infection (ARI) presenting to primary care physicians. Most schemes in Europe are based on reports from a number of ‘sentinel’ general practitioners (usually family practitioners, outpatient doctors, pediatricians), taken to be representative of the whole population.
- 1.2 Virological surveillance: Influenza viruses are isolated for antigenic testing
- 1.5 Hospital admittance data: admissions by total, or by admitting diagnosis, e.g. influenza, for keeping track of pressure on hospital admissions.
- 2.1 Designated laboratory: A designated laboratory can be either a national laboratory or a laboratory in another country (usually an international reference laboratory) with which an agreement has been made to perform testing. A contract with another country is typically made when there is no national laboratory capable of carrying out a specific task.
- 3.2 WHO targets for seasonal influenza vaccine uptake for all people at high risk, including the elderly and persons with underlying diseases, are 50% coverage by 2006 and 75% coverage by 2010 WHO position paper on influenza vaccine available at <http://www.who.int/entity/wer/2005/wer8033.pdf> and WHA resolution available at http://www.who.int/gb/e/e_wha56.html
- 3.3 Medical risk groups: individuals with chronic heart or lung diseases, metabolic or renal disease, or immunodeficiencies. <http://www.who.int/entity/wer/2005/wer8033.pdf>
- 3.4 Occupational groups: Health care workers and social care workers and other occupation groups that are exposed to the diseases due to the nature of their work.
- 3.6 Risk groups. Elderly people and individuals with chronic heart or lung diseases, metabolic or renal disease, or immunodeficiencies. <http://www.who.int/entity/wer/2005/wer8033.pdf>
- 4. National framework for pandemic preparations: a national document outlining the scope, objectives, responsibilities and operational arrangements for the country’s pandemic preparedness planning and response.
- 4.1 high level, cross-sectoral planning committee: A Government approved, national level pandemic planning committee is crucial to pandemic planning. Its members should represent ministries across the government and it should have the mandate to make or influence decisions or provide strong recommendations regarding e.g. the need for changes in legislation to implement certain control measures; reservation and release of resources etc
- 4.2 Essential services: Essential services exist both in the health sector and in other sectors. Essential services can be characterized as functions and services which are necessary to keep society functioning during a pandemic. In general, essential services are found in the following sectors: Energy, food, water, transport, telecommunications, government & public services, emergency services, health and finance.
- 4.2 Critical national infrastructure “*Critical national infrastructure is the underlying framework of facilities, system, sites and networks necessary for the functioning of the country and the delivery of the essential services.*” The following sectors are delivering essential services: Energy, food, water, transport, telecommunications, government & public services, emergency services, health and finance.

“Within these sectors there are key elements that comprise the critical national infrastructure”

<http://www.cpni.gov.uk/About/whatIs.aspx>.

- 4.3 Business continuity plans: Plans that describe how a business, a specific service or function, like power supply, public transportation or postal services, will be continued during a pandemic. A business continuity plan should take into account any dependency on other businesses or suppliers and that these will also be affected by a pandemic. The plan could be for a sector or for individual companies.
- 4.4 Planning assumptions: The parameters (e.g. timing, spread, attack rate, mortality rate, demand for health care services, duration of the pandemic wave etc.) on which plans are based because of uncertainty about the nature and impact of the next pandemic. They are usually based on predictions derived from mathematical modeling, which allows data from the three pandemics of the 20th century to be interpreted in a current context.
- 4.5 Resources: financial and human resources
- 4.5 Operational plans: Plans for delivering the policies and responses described in the national plan. Plans should exist for health sector and for pandemic preparedness in other sectors
- 5.3 Ethical framework: The ethical principles and values that exist to underpin the responses (to a pandemic), for example decisions on prioritization of resources such as antivirals should they be in short supply.
- 7.1 Health care capacities: During a pandemic it will be essential to maintain an overview of a large variety of essential commodities, such as the number of available hospital beds, antibiotics remaining in stock and remaining capacity as regards medical personnel.
- 8 Interoperability: The extent to which a country’s plans are compatible with, or take into account, those of neighboring countries, or countries with strong interconnections. Areas abutting should consider local as well as national plans
- 8.2 Neighboring countries: closest and most relevant neighboring countries
- 9.1 Systematic testing: a planned series of pandemic exercises to test different aspects of the response at defined intervals
- 9.2 Desk top/real time command post exercise:
 - Desk top exercise: The simplest form of exercise. Participants are presented with a simulated situation while remaining at their normal posts. They decide what action they would take in this situation and inform the relevant people.
 - Real time exercise: An exercise in which the timing of events is designed to be as near as possible to that expected in a real event
 - Command and control exercise: a simulated situation designed to test the functioning of the structures in place to manage the response. It may be confined to one part (e.g. government level, regional) or test the whole national system.
- 9.3 Phase 5 and 6:
http://www.who.int/entity/csr/disease/influenza/pandemic_phase_descriptions_and_actions.pdf
- 9.4 International institutions e.g. WHO; cross-border element: plans of neighboring countries taken into account/neighbors participated

- 10.1 National framework: To establish a harmonized preparedness for, and response to, a pandemic, the national and sub national levels need to be aware what the roles and responsibilities are at the different levels of administration. It is practical if the government defines a framework or a set of guidelines for the regional and local level to follow in their planning process as this will help streamline the preparedness and response. If not applicable: Highest administrative level responsible for pandemic preparedness planning
- 10.2 Audited: Has it been checked that the national and local/regional plans are in agreement on key issues (e.g. planning assumptions, provision of vaccine and antivirals), that responsibilities across administrative levels are agreed on and that there are no conflicting issues?
- 12.1 http://www.who.int/entity/csr/disease/influenza/pandemic_phase_descriptions_and_actions.pdf
- 12.2 Early cases/cluster: First suspected human cases (or cluster(s) of cases) of infection due to a new influenza virus subtype within the country.
- 12.6 Provisional triggers: The points at which it is planned to change or modify activities, for example on notification by WHO of a change of Phase; or at a particular level of influenza activity within the country concerned.
- 13.1 Managing patients includes triage, early detection of severe disease and/or persons at risk for severe disease
- 15.1 Public health measures: Interventions aimed at reducing the health impact of a pandemic. They are divided, for convenience, into pharmacological (e.g. vaccine, antivirals) and non-pharmacological measures (e.g. hand-washing, travel restrictions, school closures etc)
- 15.2 Repercussions: The secondary effects of implementing public health measures, on people and society
- 16.1 Antivirals: current strategies are based largely on neuraminidase inhibitors (oseltamivir or zanamivir) due to data suggesting they may be effective against multiple influenza virus subtypes. Treatment with adamantanes (amantadine and rimantadine) may also be considered although due to the development of high levels of resistance in both circulating seasonal influenza viruses as well as in avian influenza H5N1 viruses, their use may be limited in a pandemic.
http://www.who.int/entity/csr/resources/publications/influenza/11_29_01_A.pdf
- 17.1 Pandemic vaccine: vaccine based on the influenza virus strain causing the pandemic; WHO will determine the strain to be used to produce pandemic vaccine based on global surveillance data. Due to the time currently required to produce influenza vaccine (several months), vaccine may not be available until after the first pandemic wave.
- 18.1 Spokesperson: A person or persons (physician, scientist or politician) who it is planned to use to deliver messages to the public. The person should ideally be known to the public and trusted, and have a track record for communicating clearly and consistently to the lay public, or receive training during the interpandemic period.
- 18.2 Key language: Consider all languages spoken in the country including minority populations' language, Braille etc
- 20.2 Influenza surveillance in animals: EU/OIE regulations