

Patient Care Checklist

New influenza A (H1N1)

15 May 2009

See WHO website (www.who.int) for latest version.

This checklist is intended for use by hospital staff treating anyone with a medically suspected or confirmed case of new influenza A (H1N1) per local definition. This checklist highlights areas of care critical for the management of new influenza A (H1N1).

It is not intended to replace routine care.

UPON ARRIVAL TO CLINICAL SETTING/TRIAGE

- ☐ Direct patient with flu-like symptoms to designated waiting area
- ☐ Provide instruction and materials to patient on respiratory hygiene/cough etiquette
- ☐ Put medical/surgical mask on patient if available and tolerable to patient

UPON INITIAL ASSESSMENT

- ☐ Record respiratory rate over one full minute and oxygen saturation if possible
- ☐ If respiratory rate is high or oxygen saturation is below 90% alert senior care staff for action
- ☐ Record history, including flu-like symptoms, date of onset, travel, contact with people who have flu-like symptoms, co-morbidities
- ☐ Consider specialized diagnostic tests (e.g. RT-PCR)
- ☐ Use medical/surgical mask, eye protection, gloves when taking respiratory samples
- ☐ Label specimen correctly and send as per local regulations with biohazard precautions
- ☐ Consider alternative or additional diagnoses
- ☐ Report suspected case to local authority

INITIAL AND ONGOING PATIENT MANAGEMENT

Supportive therapy for new influenza A (H1N1) patient as for any influenza patient including:

- ☐ Give oxygen to maintain oxygen saturation above 90% or if respiratory rate is elevated (when oxygen saturation monitor not available)
- ☐ Give paracetamol/acetaminophen if considering an antipyretic for patients less than 18 years old
- ☐ Give appropriate antibiotic if evidence of secondary bacterial infection (e.g. pneumonia)
- ☐ Consider alternative or additional diagnoses
- ☐ Decide on need for antivirals* (oseltamivir or zanamivir), considering contra-indications and drug interactions

BEFORE PATIENT TRANSPORT/TRANSFER

- ☐ Put medical/surgical mask on patient if available and tolerable to patient

BEFORE EVERY PATIENT CONTACT

- ☐ Put on medical/surgical mask
- ☐ Clean hands
- ☐ Put on eye protection, gown and gloves if there is risk of exposure to body fluids/splashes
- ☐ Change gloves (if applicable) and clean hands between patients
- ☐ Clean and disinfect personal/dedicated patient equipment between patients

IF USING AEROSOL-GENERATING PROCEDURES ALSO (e.g. intubation, bronchoscopy, CPR, suction)

- ☐ Allow entry of essential staff only
- ☐ Put on gown
- ☐ Put on particulate respirator (e.g. EU FFP2, US NIOSH-certified N95) if available
- ☐ Put on eye protection, and then put on gloves
- ☐ Perform planned procedure in an adequately ventilated room

BEFORE PATIENT ENTRY TO DESIGNATED AREA (isolation room or cohort)

- ☐ Post restricted entry and infection control signs
- ☐ Provide dedicated patient equipment if available
- ☐ Ensure at least 1 metre (3.3 feet) between patients in cohort area
- ☐ Ensure local protocol for frequent linen and surface cleaning in place

BEFORE ENTERING DESIGNATED AREA (isolation room or cohort) STAFF AND VISITORS

- ☐ Put on medical/surgical mask
- ☐ Clean hands

BEFORE LEAVING DESIGNATED AREA (isolation room or cohort) STAFF AND VISITORS

- ☐ Remove any personal protective equipment (gloves, gown, mask, eye protection)
- ☐ Dispose of disposable items as per local protocol
- ☐ Clean hands
- ☐ Clean and disinfect dedicated patient equipment and personal equipment that has been in contact with patient
- ☐ Dispose of viral-contaminated waste as clinical waste

BEFORE DISCHARGE OF CONFIRMED OR SUSPECTED CASE

- ☐ Provide instruction and materials to patient/caregiver on respiratory hygiene/cough etiquette
- ☐ Provide advice on home isolation, infection control and limiting social contact
- ☐ Record patient address and telephone number

AFTER DISCHARGE

- ☐ Dispose of or clean and disinfect dedicated patient equipment as per local protocol
- ☐ Change and launder linen without shaking
- ☐ Clean surfaces as per local protocol
- ☐ Dispose of viral-contaminated waste as clinical waste

* See instruction page for additional information on terms used. Equipment on this checklist is recommended if available.

**This checklist is not intended to be comprehensive.
Additions and modifications to fit local practice
are encouraged.**

ABOUT THIS CHECKLIST

The WHO *Patient Care Checklist: new influenza A (H1N1)* is intended for use by hospital staff treating a patient with a medically suspected or confirmed case of new influenza A (H1N1). This checklist combines two aspects of care: i) clinical management of the individual patient and ii) infection control measures to limit the spread of new influenza A (H1N1).

WHO Patient Safety Checklists are practical and easy-to-use tools that highlight critical actions to be taken at vulnerable moments of care. They are produced in a format that can be referred to readily and repeatedly by staff to help ensure that all essential actions are performed. WHO Patient Safety Checklists are not comprehensive protocols and are not intended to replace routine care.

How to use the checklist

Staff can use checklists at the moment of care to ensure that no critical items are missed, or immediately following delivery of care to confirm that all essential steps were carried out. "Ticking the box" is not essential for checklist use and may not be practical or desirable for some sections (e.g. 'Before every patient contact'). The means of displaying and using the checklist can be determined by individual facilities. The checklist may form part of the patient's clinical record. It may also be reproduced as wall posters, or on cards for staff members to carry with them. Facilities may wish to extract specific parts of the checklist for use in each of these formats.

This checklist does not replace clinical guidance or clinical judgment. Its users should also familiarize themselves with the relevant WHO guidance documents referenced below, which were used in the development of the checklist.

Local modification

The WHO *Patient Care Checklist: new influenza A (H1N1)* may be reformatted, reordered or revised to accommodate local practice while ensuring completion of the critical steps in an efficient manner. Facilities and individuals are cautioned, however, against making the checklist unmanageably complex.

Related guidance

Guidance relating to infection control:

Infection prevention and control in health care in providing care for confirmed or suspected A (H1N1) swine influenza patients Interim guidance (Publication date: 29 April 2009)
http://www.who.int/csr/resources/publications/infection_control/en/index.html

Infection prevention and control of epidemic- and pandemic-prone acute respiratory diseases in health care. WHO Interim Guidelines (Publication date: June 2007)
http://www.who.int/csr/resources/publications/WHO_CD_EPR_2007_6/en/

Guidance relating to clinical management:

Clinical management of human infection with avian influenza A (H1N1) virus (Publication planned) see <http://www.who.int/>

*Currently there are a lack of data on the clinical effectiveness of antivirals for this disease. Antiviral drugs are to be used according to national pandemic influenza preparedness plans. If antivirals are prescribed, oseltamivir or zanamivir should be used for influenza A (H1N1) patients because of increased risk of the resistance with other antivirals. Where antiviral drugs are available for treatment, clinicians should make decisions based on assessment of the individual patient's risk. Risks versus benefits should also be evaluated on a case-by-case basis.

Such guidance may be updated as the situation evolves. For the most up-to-date guidance on the checklist and other documents, refer to the WHO web site (www.who.int)

GLOSSARY OF SELECTED CHECKLIST TERMS

Clean hands: Hands can be cleaned either by handwashing with soap and water or by handrubbing with an alcohol-based handrub formulation. The preferred technique while caring for suspected or confirmed cases of new influenza A (H1N1) is handrubbing, unless hands are visibly soiled. Hands must be cleaned at five key moments: 1) before touching a patient; 2) before clean/aseptic procedure; 3) after body fluid exposure risk; 4) after touching a patient; and 5) after touching patient surroundings.

Designated area (isolation room / cohort): The placing of patients either colonized or infected with the same pathogen in one designated area. It is specifically used when single or isolation rooms are not available. It allows for identified health-care workers to provide care to these specific patients with the aim of trying to prevent spread of infection to others. Patients with confirmed infection should ideally be in a separate cohort to those with suspected infection.

Cough etiquette: Health-care workers, patients and family members should cover mouth and nose (e.g. with a tissue) when coughing or sneezing. If a tissue is used, discard it in a bin with a lid and then clean hands. Cough etiquette should be communicated to patients through posters and leaflets.

Separate waiting area: Waiting area for symptomatic persons should be separate from general waiting area. This can be a separate part of the general waiting area as long as there is at least one metre (3.3 feet) distance between the designated area and the regular waiting area. Maintain at least one metre between symptomatic patients within this designated area.

Eye protection: This can either be an eye visor, goggles, or a face shield. Conventional eye glasses are not designed to protect against splashes to eye mucosa and should not be used as eye protection.

Flu-like symptoms: fever, cough, headache, muscle and joint pain, sore throat, runny nose, and sometimes vomiting and diarrhoea.

Gown: A clean, non-sterile long-sleeved gown.

Infection control guidance to patient/caregiver on discharge: If patient still symptomatic or if patient less than one year old (Patients less than one year old may continue to be infectious for three weeks after cessation of symptoms):

- Patient quarantined: the sick person should be placed in a separate room and should have limited social contact.
- Instruction on cough etiquette.
- All persons in the household should perform hand hygiene frequently and after every contact with the sick person.
- The caregiver should wear the best available protection to prevent exposure to respiratory secretions, and avoid contact with body fluids or contaminated items; minimize close (less than 1 metre) and face-to-face contact with the patient; perform hand hygiene when indicated.

Medical/surgical masks: procedure or surgical masks to protect the wearer's nose and mouth from inadvertent exposures (e.g. splashes).

Particulate respirator: A special type of fit-tested mask with the capacity to filter particles to protect against inhaling infectious aerosols (e.g. EU FFP2 and US NIOSH-certified N95).

Respiratory hygiene: See cough etiquette

RESPIRATORY RATE (reference for high values):

AGE	RESPIRATORY RATE
<2 months	≥60/minute
2–11 months	≥50/minute
1–5 years	≥40/minute
>5–12 years	≥30/minute
≥13 years	≥20/minute

CHECKLIST DEVELOPMENT PROCESS

In response to the pandemic threat by a new influenza A (H1N1) strain, the checklist development process began on 30 April 2009. The checklist development group in the WHO Patient Safety Programme collaborated with technical experts in WHO Health Security and Environment. They consulted experts in three areas: i) infection control, ii) clinical management of pandemic-prone Influenza, and iii) health care checklists. The design and content of the checklist were developed iteratively through successive rounds of consultation. Clinical teams in a number of settings tested its clarity and usability. Its use in clinical practice will be the subject of ongoing evaluation.