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Pandemic (H1N1) 2009 Influenza Infection Prevention and Control Precautions for All Healthcare Facilities

These guidelines must be implemented by all healthcare workers

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Foreword

- This document describes the Standard, Droplet and Contact Precautions that are required to be implemented by all healthcare workers (HCW) caring for patients with suspected or confirmed pandemic (H1N1) 2009 influenza
- Standard Precautions¹ are available at http://www.hpsc.ie/hpsc/A-
 Z/EmergencyPlanning/AvianPandemicInfluenza/SwineInfluenza/AdviceforHealthProfessionals/InfectionControl/
- Standard, Droplet and Contact Precautions are adapted from:
 Siegal JD, Rhinehart E, Jackson M, Chiarello L, and the Healthcare Infection Control Practices
 Advisory Committee, Guideline for Isolation Precautions: Preventing Transmission of Infectious
 Agents in Healthcare Settings, 2007. www.cdc.gov/ncidod/dhqp/pdf/isolation2007
- Factsheets, Posters, Case definitions, and diagnostic algorithms are available at www.hpsc.ie

1. Introduction

1.1 What are Standard Precautions?

<u>Standard Precautions</u> are evidence based clinical work practices and measures published by the Centers for Disease Control and Prevention (CDC) in 1996 and updated in 2007 that prevent transmission of infectious agents in healthcare settings.

Standard Precautions are based on the principle that all blood, body fluids except sweat, secretions, excretions, non intact skin and mucous membranes may contain transmissible infectious agents. **Standard Precautions** must be applied by **all** HCWs to the care of **all** patients/clients in **all** healthcare settings regardless of the suspected or confirmed presence of an infectious agent.

HCWs must apply the following set of work practices and measures for **all** patients:

- Occupational health programme
- Appropriate patient placement
- Hand hygiene
- Patient movement and transfer
- Respiratory hygiene and cough etiquette
- Use of personal protective equipment (PPE)
- Decontamination of the environment
- Decontamination of reusable medical equipment
- Management of linen and laundry
- Management of needle stick injuries
- Management of waste
- Management of spillages of blood and body fluids
- Safe injection practices
- Management of sharps
- 1.2 The World Health Organisation (WHO) advises that Droplet Precautions in addition to Standard Precautions are implemented to prevent transmission of Pandemic (H1N1) 2009 influenza in healthcare settings².
 http://www.who.int/csr/resources/publications/20090429_infection_control_en.pdf
- 1.3 In response to published data reporting a significant incidence of gastrointestinal symptoms associated with Influenza (H1N1) the Irish Pandemic Influenza Expert Group recommended on the 12th May 2009 that Contact Precautions be included in addition to Droplet and Standard Precautions^{3,4}. GI symptoms have been reported from 24% of cases in EU/EEA.⁵
- 2. Standard, Droplet and Contact Precautions are outlined in the following pages.
 - **2.1** Droplet and Contact precautions should be implemented for at least 7 days or until clinician deems otherwise (e.g. infectivity can be prolonged in the immunosuppressed and children)

	Key Components	PRECAUTIONS	Key Elements of Clinical Practices and Measures	
2.2	Occupational Health Programme	Standard Precautions	 HCWs should self monitor their own health for influenza like symptoms (ILI) HCWs with symptoms should not attend work and should immediately report symptoms to their line manager All healthcare facilities should have a surveillance programme in place to monitor staff and patients for ILI. Clusters of outbreaks should be reported to the local Public Health Department. See Protocol for surveillance of Influenza-like illness in Healthcare workers during Pandemic Influenza A(H1N1)v Mitigation Phase at www.hpsc.ie 	
2.3	Patient	<u>Standard</u>	Home	
	Placement	<u>Precautions</u> Droplet	 Assess the patient with suspected or confirmed pandemic (H1N1) 2009 influenza by phone at home if possible 	
		Precautions	GP/Primary care/Community	
		Contact Precautions	 Place in a single room and avoid communal areas if possible. Otherwise do not place within approximately 1 metre of other patients 	
			 Place patient with suspected or confirmed pandemic (H1N1) 2009 influenza in a single room preferably with ante room and en-suite facilities Emergency departments without single rooms must have interim arrangements in place to prioritise transfer to an appropriate single room Avoid communal areas and placing patient within approximately 1 metre of other patients Ambulance Refer to ambulance advice document at www.hpsc.ie 	
2.4	Hand Hygiene	Standard Precautions	Hand hygiene using liquid soap or alcohol hand gel/rub must be performed before and after all patient care procedures	

	Key Components	PRECAUTIONS	Key Elements of Clinical Practices and Measures	
2.5	Patient Movement and Transfer	Standard Precautions Droplet Precautions Contact Precautions	External transfer Patient should wear a surgical mask outside their room It is the responsibility of the transferring facility to inform staff of the precautions required Refer to ambulance advice document at www.hpsc.ie Internal transfer Minimise movement of patient from single room Patient should wear a surgical mask outside their room Staff should be informed of the precautions required in the receiving departments (e.g. diagnostic departments) Avoid holding patients in communal areas (radiology etc) HCW PPE: Wear a surgical mask and observe hand hygiene Care after death As there is a risk of blood or body fluid leakage in those who are deceased gloves, surgical mask, apron and Goggles (if splashing/spraying risk) should be worn by all handling the remains. Hand hygiene should be performed after removing PPE Where there is a risk of leakage of body fluids body bags should be used for transporting the remains Autopsy should be undertaken in a premises complying with HBN 20 Facilities for mortuary and post-mortem services, NHS Estate. During autopsy procedures HCWs should wear the PPE advised for an aerosol generating procedure (see 2.6) and comply with Health Services Advisory Committee, Safe working and the prevention of infection in the mortuary and post-mortem room, 2003 Embalming is permitted. Gloves, surgical mask, apron and goggles should be worn by morticians Viewing and touching of remains is permitted once skin cleansing/hygienic preparation is completed	

	Key Components	PRECAUTIONS	Key Elements of Clinical Practices and Measures
2.6	Respiratory Hygiene & Cough Etiquette	Standard Precautions	As per Standard Precautions patients presenting with signs and symptoms of undiagnosed respiratory infections should be: Identified promptly in primary care and emergency departments Offered a surgical mask Symptomatic persons who accompany ill patients should also be offered a surgical mask Encouraged to maintain spatial separation, ideally a distance of approximately 1 metre, from others in common waiting areas Emergency departments and primary care facilities should: Ensure that supplies of tissues, foot operating waste bins and hand hygiene facilities are available in all departments including waiting areas throughout the facility Educate patients/visitors/carers on Respiratory Etiquette and Cough Hygiene using some or all of the following: Patient information leaflets Posters in all departments especially waiting areas See Appendix A for respiratory hygiene and cough etiquette poster. The poster can be downloaded from the following website http://www.hpsc.ie/hpsc/A-Z/EmergencyPlanning/AvianPandemicInfluenza/SwineInfluenza/AdvicefortheGeneralPublic/RespiratoryHygiene/

	Key	PRECAUTIONS	Key Elements of Clinical Practices and Measures		
	Components				
2.7	Personal	<u>Standard</u>	The following applies to all settings: GP/Primary care/Ambulance transfer/Hospital		
	Protective	<u>Precautions</u>			
	Equipment		Patient should wear:		
	(PPE)	<u>Droplet</u>	A surgical mask when outside their single room		
	(/	<u>Precautions</u>	7 Tourglour mask when outside their single room		
		11CCddtions	HCWs must wear the following for:		
		<u>Contact</u>	Tiews must wear the following for.		
			4 De Person		
		<u>Precautions</u>	1. Routine care		
			 Surgical mask, Plastic Apron/Gown, Gloves (& Goggles if splashing/spraying risk) 		
			Replace mask and all PPE if damp, wet or torn		
			2. Aerosol Generating Procedures		
			 FFP2 or FFP3 mask (correctly fitted), Goggles, Long sleeved disposable gown, Gloves 		
			 Refer to Aerosol Generating Procedures document and to PPE poster 		
			Training to the territory of the territo		
			HCWs when putting on and removing DDF must.		
			HCWs when putting on and removing PPE must:		
			 Put on and remove in the correct sequence (refer to PPE poster) 		
			 Remove and dispose of gloves & apron/gown inside the single room 		
			 Remove and dispose of mask in the ante room or immediately outside the single room if there is no 		
			ante room. Ensure door is closed.		
			 Decontaminate hands immediately after removing PPE 		
			Visitors should be:		
			Kept to a minimum		
			Wear a surgical mask in patients room		
			Wear gloves and apron/gown if assisting with care or in close physical contact with patient		
			Educated on:		
			 Donning an removing PPE 		
			o Hand hygiene		
			Respiratory hygiene and cough etiquette		

	Key Components	PRECAUTIONS	Key Elements of Clinical Practices and Measures
2.8	Environmental Decontamination	Standard Precautions Droplet Precautions Contact Precautions	 In addition to Standard Precautions: Only take essential equipment and supplies into the room. Do not stockpile as unused stock will have to be discarded on cessation of additional precautions Patient charts/records should not be taken into the single room The frequency and intensity of cleaning may need to be increased based on the patients level of hygiene and the level of environmental contamination HCWs must wear surgical mask, gloves, apron for cleaning the patients room Cleaning and disinfection
			 Patient's room Thoroughly clean the environment and furniture and all patient care equipment daily with a neutral detergent and disinfectant (hypochlorite solution 1000 ppm) paying special attention to frequently touched sites and equipment close to the patient On patient discharge/transfer - cleaning and disinfection of the environment: Prior to initiating environmental cleaning and disinfection, all privacy, shower and window curtains must be removed and sent for laundering All disposable items including paper towels and toilet paper should be discarded All sterile and non-sterile supplies in the patient room to be discarded on patient transfer/discharge Treatment rooms (e.g., x-ray etc)
			 Clean and disinfect the environment and furniture after use with a neutral detergent and disinfectant (hypochlorite solution 1000 ppm) paying special attention to frequently touched sites (door handles, bed rails etc) Medical equipment (refer to 2.9)
	Dishes and Eating Utensils		Cutlery and crockery - No additional measures are required for cutlery and crockery washed in a dishwasher or wash with liquid detergent and water

	Key Components		Key Elements of Clinical Practices and Measures
2.9	Patient Care Equipment & Decontamination of Medical Devices Linen/Laundry	Standard Precautions Droplet Precautions Contact Precautions Standard Precautions	 In addition to Standard Precautions Dedicate patient care medical devices (e.g., thermometers, sphygmomanometers, stethoscopes, glucometers) to single patient use Use disposable equipment whenever possible Manufacturer's instructions should be followed for cleaning and disinfecting of reusable medical equipment after use Single use items should be disposed of after use Bedpan/Commodes Use a working washer disinfector at 80°C for one minute Dedicate a commode to single patient use if no en suite available Decontaminate commode surface after each patient use with a hypochlorite solution 1000 ppm No additional precautions necessary
2.10		Precautions	As per Standard Precautions all contaminated laundry should be carefully placed in an alginate stitched or water soluble bag and then placed into a laundry bag clearly identified with labels, colour-coding or other methods prior to transport to an approved laundry capable of dealing with contaminated linen
2.11	Management of needle stick injuries (NSI) and blood and body fluid exposure	Standard Precautions	No additional precautions necessary
2.12	Management of Waste	Standard Precautions	No additional precautions necessary for Non Healthcare Risk and Healthcare Risk Waste Dispose of all PPE as Healthcare Risk Waste (e.g. used masks)

	Key Components	STANDARD PRECAUTIONS	Key Elements of Clinical Practices and Measures
2.13	Management spillages of blood and body fluids	Standard Precautions	No additional precautions necessary
2.14	Safe Injection Practices	Standard Precautions	No additional precautions necessary
2.15	Management of sharps	Standard Precautions	No additional precautions necessary

Bibliography

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- 3. Outbreak of Swine-Origin Influenza A(H1N1)v Virus infection- Mexico, March-April 2009 MMWR 58(17):467-470
- 4. Swine-origin influenza A (H1N1)v Virus infections in a school New York city April 2009 MMWR 58(17):470-472
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