Infection Prevention and Control Team (IPCT)

MUMPS VIRUS IN THE HEALTHCARE SETTING

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Title of Policy: Mumps virus in the healthcare setting


Scope: Organisation wide

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Expiry Date: October 2017

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Policy application / Target Audience: Throughout NHS Ayrshire and Arran

Policy Statement: It is the responsibility of all staff to ensure that the information contained in this guidance is implemented in order to minimise the risk to patients, staff and others from mumps virus infection.

Last reviewed: October 2014

Agreed by: Infection Control Policy Review Group

Electronic approval by: Dr Alison Graham

Medical Director

Date: 28 November 2014
1.0 INTRODUCTION

Mumps is an acute viral disease caused by Paramyxovirus. It is characterised by bilateral parotid (Salivary Gland) swelling, although it may present with parotitis (unilateral swelling). Parotitis may be preceded by symptoms such as fever, headache, malaise and myalgias.

- Neurological complications, including meningitis and encephalitis, may occur before or after parotitis and can also occur in its absence
- Other complications can occur including pancreatitis, oophoritis (ovarian inflammation) and orchitis (testicular inflammation). Sensorineural deafness is a well recognised complication of mumps
- Most cases of mumps in healthcare personnel have been community acquired. However, mumps transmission has occurred in hospitals and long-term care facilities housing adolescents and young adults. Mumps poses a small but real risk to both patients and staff in healthcare settings
- Mumps is usually diagnosed based on the clinical presentation of symptoms

2.0 GENERAL INFORMATION

<table>
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<th>Mode of Transmission</th>
<th>Mumps is transmitted via respiratory droplets or direct contact with nasal/throat secretions, from infected individuals. The portals of entry are the nose and mouth</th>
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</table>
| Incubation period    | The incubation period is 12-25 days, typically 16 to 18 days to onset of parotid swelling  
|                      | Symptoms typically resolve in 3 to 10 days |
| Period of communicability | Individuals are usually infectious up to 7 days before onset of symptoms until 9 days after onset of parotid swelling  
|                      | However individuals are most infectious around 2 days before onset of symptoms up to 4 days after  
|                      | Significant exposure has been assessed as direct or droplet contact with infectious saliva during the period 2-3 days before and up to 9 days after the onset of parotid swelling |

The following should be used as a guide to determine significant exposure:

- Close contact in the same room for a significant period of time (15 minutes or more)
- Close face to face contact (within 3 feet) e.g. whilst having a conversation, oral examination

| Individuals most at risk | Non immune individuals (especially young children) or severe immune compromised |
### Notifiable Disease
- Initial notification should be made by telephone to the **Consultant in Public Health (Medicine) (CPH(M))** at Afton House, Ailsa Hospital on **01292 885858** or out of hours contact the CPH(M) via Crosshouse Hospital switchboard on 01563 521133
- The CPH(M) should then be formally notified within 3 days using the Scottish Care Information (SCI) system or SCI form

### 3.0 INFECTION CONTROL TRANSMISSION BASED PRECAUTIONS

Transmission Based Precautions (TBPs) covered in this policy are **additional precautions** designed to prevent further transmission to be used when an individual is suspected/known to have an infectious agent/disease.

Please [click here](#) to access all sections of the IPC manual.

| Patient Placement | Patients with suspected/confirmed mumps infection must be nursed in a single room  
|                   | Isolation should continue up to 9 days after the onset of parotid swelling  
|                   | If possible transfer to a negative pressure isolation room  
| Hand Hygiene      | Hands must be decontaminated as per the WHO 5 moments for hand hygiene, detailed guidance can be obtained by clicking the link below  
|                   | Patients should be encouraged to carry out thorough hand hygiene  
| Personal Protective Equipment (PPE) | Transmission based droplet precautions, including respiratory hygiene and cough etiquette while caring for a patient suspected or confirmed as having mumps.  
|                   | Respiratory and facial protection (RPE) for Healthcare Workers (HCWs) whilst patient is considered infectious:  
|                   | Surgical facemask, if there is a risk of splashing or spraying of blood / body fluids from patient contact procedure  
|                   | FFP3 respirator for Aerosol Generated Procedures  
| Linen             | All linen should be discarded as fouled/infected i.e. placed in a water soluble bag then into a clear plastic bag and lastly into a red laundry bag  
|                   | Staff should wear appropriate PPE when carrying out this task  
| Clinical Waste    | All waste must be discarded as clinical waste within the isolation room  

| Patient Care Equipment | • Equipment should be kept to a minimum. Prior to removal from the room, all equipment must be decontaminated using a chlorine based solution e.g. Actichlor™. Please check manufacturer’s instructions  
• Communal facilities such as baths, bidets and showers should be cleaned and decontaminated between all patients, especially on delivery suites, post-natal wards and other high risk areas, such as burns units |
| Hotel Services | • Enhanced cleaning with a hypochlorite solution should be undertaken by hotel services staff until instructed otherwise  
• Following the removal of the patient, the room should have a terminal clean carried out prior to the next patient being admitted |
| Transferring patients | • If possible, do not transfer patients until isolation is no longer required, unless to a negative pressure isolation room  
• Prior to transfer, staff must inform any receiving ward/department that the patient has suspected/confirmed mumps and a specimen has been taken  
• Inform and discuss with a member of the Infection Prevention and Control Team (IPCT) |
| Specimens | • It is recommended that from all suspected cases, a viral throat swab should be obtained, or the individual should gargle with tap water into a sputum pot and submitted to the laboratory  
• Specific antibodies can be detected between 1 and 6 weeks after the onset of parotid swelling and will confirm infection |
| Patient clothing | • If a relative or carer wishes to take personal clothing home, staff must place soiled clothing into a clear plastic bag then into a patient’s clothing bag. Staff must also ensure that a [Home Laundry Information Leaflet](#) is issued |
| Staff / patient contacts | • It is important that the IPCT is informed of all hospital in-patients and/or staff members with suspected or confirmed mumps infection  
• A list of possible patient close contacts i.e. in the same room for a significant period of time, or face to face contact (within 3 feet) should be reported to the IPCT |
| HCWs immune status | • The immune status of HCWs should be documented by the Occupational Health Department (OHD) during the pre-employment process |
• A member of staff will be considered immune to mumps if they have evidence of previously receiving 2 doses of the Measles, Mumps and Rubella (MMR) vaccine. MMR vaccination is recommended for the protection of staff, patients and visitors.

| HCWs exposed to mumps | HCW immune status should be determined by the OHD if:
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<tr>
<td></td>
<td>• HCW susceptible (such as non-immune staff) or</td>
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<td>• Staff exposed to mumps who have significant contact</td>
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<td>with a confirmed case(s) or</td>
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<td>• They work in high risk areas (A&amp;E, ENT, Maxillofacial,</td>
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<td></td>
<td>Infectious Diseases)</td>
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<tr>
<td></td>
<td>• Staff who are susceptible to mumps (such as non-</td>
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<td></td>
<td>immune staff) should not work with patients suspected</td>
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<td></td>
<td>or confirmed to have mumps</td>
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<td>• Although vaccination of non-immune staff contacts will</td>
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<td>not prevent infection in those previously exposed, it is</td>
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<td>recommended</td>
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<td>• Infection during the first trimester of pregnancy may</td>
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<td>increase the rate of spontaneous abortion. There is no firm evidence that mumps during pregnancy causes congenital malformations</td>
</tr>
</tbody>
</table>

| HCWs infected with mumps | HCWs with clinical mumps infection should be excluded from work until 9 days after the onset of parotid swelling |

4.0 REFERENCES


2. Centre for Immunisation (July 2012) Local Health Department Guidelines for the Epidemiological Investigation and Control of Mumps.

3. HPS (May 2014) Mumps, immunisation and vaccines, and clinical signs and symptoms.  
   www.hps.scot.nhs.uk/immvax/mumps.aspx [last accessed 21/8/14]

4. NICE CKS (July 2013) Mumps, child infections and infestations.  
   http://cks.nice.org.uk/mumps [last accessed 18/06/14]

Acknowledgement

5. Thanks to West of Scotland Regional Virus Laboratory for information provided.