# Mumps information for General Practitioners

It is important to recognise the early symptoms and signs of mumps to prevent further spread of this highly contagious illness in the community.

## **Diagnosis**

Mumps frequently has a non-specific prodrome including malaise, anorexia, low grade fever and myalgia leading to acute onset of uni or bilateral, tender, self-limited swelling of the parotid or other salivary gland. Careful history taking to determine the susceptibility, exposure and symptoms can assist diagnosis.

## Susceptibility

Those susceptible include:

- Anyone who is born after 1965 who is not vaccinated with 2 mumps containing vaccines e.g. MMR (Measles-Mumps-Rubella). Be aware that some people from overseas may have received the measles vaccine without the mumps component. In Australia, mumps vaccine became available in the early 1980s. Two doses of MMR vaccine were given after 1994.
- Anyone who received their first dose of MMR vaccine before 12 months of age, and has not had 2
  doses of MMR vaccine after 12 months of age (doses received earlier than 12 months of age do
  not count as a lifetime dose).
- Babies 6-12 months old, as maternal antibodies have declined and babies are not yet immunised.
- People who are immunocompromised at any age, even if immunised.

Mumps can occur in those who are fully immunised, but the disease is generally less severe.

## **Exposure**

Susceptible people who have contact with an infectious case of mumps may get mumps, noting that up to one third of infectious cases may be asymptomatic. Symptoms develop within 12-25 days (most often between 16 and 18 days) after being exposed to the infectious case. Individuals are usually infectious up to 7 days before and up to 5 days after onset of parotitis.

Mumps generally does not circulate in the NT, and infectious cases of mumps are most often acquired interstate or overseas.

## **Diagnosis**

The prodrome is usually non-specific, consisting of low-grade fever, malaise, headache, myalgia and anorexia. These symptoms, or rarely lower respiratory symptoms in young children, are the only



manifestations in up to 50% of cases. The prodrome usually occurs approximately 48 hours before classical symptoms of parotid or other salivary gland tenderness and/or swelling occurs.

#### **Parotitis**

Parotitis occurs in approximately 65-70% of symptomatic cases and is caused by direct infection of the ductal epithelium with associated local inflammation. This is usually preceded by local parotid tenderness and occasionally earache. Parotid enlargement of the contralateral gland occurs in approximately 90% of cases but this may be delayed by several days and the swelling can last for up to 10 days.

### **Complications**

Mumps can have some serious complications that need to be considered. Complications are reduced in those who have been vaccinated. They include:

- Orchitis: Epididymo-orchitis occurs in up to 15-20% of post-pubescent males and is characterized by high fevers, severe testicular pain with erythema and swelling of the scrotum.
- Oophoritis: Occurs in up to 7% of post pubescent girls.
- Aseptic meningitis: The most frequent extra-salivary complication of mumps but is usually asymptomatic (up to 50%) with only approximately 4-6% showing clinical signs.

#### Less common neurologic complications

• Encephalitis, deafness, Guillain-Barre syndrome, transverse myelitis and facial palsy.

#### Less common end-organ syndromes linked to mumps

• Thyroiditis, myocardial involvement, pancreatitis, interstitial nephritis and arthritis.

## **Testing**

The best test for mumps is PCR on a throat or buccal swab.

## Public health response

Isolate the case at home until at least 5 days after the onset of swelling of the salivary glands, or until the swelling goes down, whichever is sooner, at which time the case is no longer considered infectious.

It is best to avoid alerting schools and child care until the case can be confirmed. CDC will assist in alerting appropriate institutions and contacts.

Ensure patients are up to date with the mumps vaccination. Babies are due at 12 and 18 months of age (MMR or MMRV). All adults born after 1965 should have had 2 doses of mumps containing vaccine (now given as MMR).

# **Related information**

Mumps | NT Health

## **Contact**

For more information contact the Public Health Unit's Centre for Disease Control in your region.

The full list of contacts of contacts can be found at NT Health.

Location	Address	Phone	Fax	Email
Darwin	Ground Floor, Building 4 Royal Darwin Hospital Rocklands Drive Tiwi NT 0810	(08) 8922 8044 1800 008 002	(08) 8922 8310	CDCSurveillance.DARWIN@nt.gov.au
Katherine	O'Keef House Katherine Hospital Gorge Road Katherine NT 0850	(08) 8973 9049	(08) 8973 9048	CDC.Katherine@nt.gov.au
Tennant Creek	Schmidt Street Tennant Creek NT 0860	(08) 8962 4259	(08) 8962 4420	CDC.Barkly@nt.gov.au
Alice Springs	Disease Control Unit Lower Ground Floor Eurilpa House, 25 Todd Street Alice Springs NT 0870	(08) 8951 7540	(08) 8951 7900	CDC.alicesprings@nt.gov.au
Nhulunbuy	Corner Mathew Flinders Way and Chesterfield Court Nhulunbuy NT 0880	(08) 8987 0357	(08) 8987 0500	CDCGove.DoH@nt.gov.au