Respiratory syncytial virus (RSV)

NSW Control Guidelines for Public Health Units

Revision history			
Version	Date	Revised by	Changes
1.0	1 September 2022	Communicable Diseases Branch	Development of the guideline to reflect RSV becoming a notifiable condition in NSW
1.1	2 November 2022	Communicable Diseases Branch	Addition of outbreak follow up in a disability care facility

1. Summary

Public health priority

Routine.

PHU response time

Enter confirmed cases on NCIMS within 5 working days if the notification is not uploaded via electronic data entry. Respond to a report of an outbreak in a residential care facility on the same day.

2. The disease

Infectious agent

Respiratory syncytial virus (RSV) is a single stranded RNA virus which causes respiratory tract infections, in young children and older adults.

Mode of transmission

RSV is spread from person-to-person by infectious droplets. Transmission may occur through direct and indirect (fomite) contact. RSV can remain on hard surfaces for several hours and on skin for shorter amounts of time.

Incubation period

The typical incubation period is 5 days, with a range of 2 to 8 days.

Infectious period

The infectious period is unclear but is probably from before symptoms start until recovery. Most people recover from the infection within about 10 days.

Clinical manifestations

Symptoms begin between 2 and 8 days after exposure. Most cases are mild, with symptoms of a runny nose, cough and fever. Sometimes an ear infection can follow. Symptoms can be more severe in babies under 6 months with wheezing and shortness of breath, irritability and poor feeding. RSV infection can also result in pneumonia, especially in the very young, the very old or those with weakened immune systems.

3. Surveillance objectives

To monitor the epidemiology of RSV and so inform the development of better prevention strategies.

4. Data management

Enter confirmed cases on NCIMS within 5 working days of notification if the notification is not uploaded via electronic data entry.

5. Case definition

Confirmed cases of RSV are notifiable.

Confirmed case

A confirmed case requires **laboratory definitive evidence** only.

Laboratory definitive evidence

1. Isolation of respiratory syncytial virus by cell culture

OR

2. Isolation of respiratory syncytial virus by nucleic acid test (NAT)

OR

3. Detection of respiratory syncytial virus antigen

OR

4. Seroconversion, or a significant increase in antibody level such as a four fold rise in titre, to respiratory syncytial virus between paired sera of immunoglobulin G (IgG) or total antibody.

6. Case management

No public health investigation or response is required for individual cases of RSV. Where an outbreak in a residential care or disability facility is reported, PHUs to provide acute respiratory infection outbreak management guidance if required – see section 8.

7. Contact management

Not applicable for individual cases of RSV.

8. Special situations

Outbreak in a residential care facility (RCF)

Two or more cases of RSV infection in residents in a residential or disability care facility within a period of 72 hours is considered an outbreak.

Where RSV is identified as the cause of an outbreak, the Residential Aged Care Facility (RACF) or Disability Care Facility (DCF) should manage cases as per the most appropriate guidance:

- Guidance for Residential Aged Care Facilities on the public health management of Acute Respiratory Infections (including COVID-19 and Influenza)
  Public Health Guidance for managing ARI in RACFs
- Guidance for Disability Care Facilities on the public health management of Acute Respiratory Infections (including COVID-19 and Influenza) Public Health Guidance for managing ARI in DCF

Outbreak data entry by PHUs should follow the minimum data entry requirements in line with other acute respiratory outbreaks.