

Category 1: Immediate reporting telephonically followed by written or electronic notification within 24hrs of diagnosing a case

22. RESPIRATORY DISEASE CAUSED BY A NOVEL RESPIRATORY PATHOGEN

Disease epidemiology	Who must notify and when?	Case definition		
		Suspected case	Probable case	Confirmed case
<p>Previously unrecognised/ undetected pathogens may be responsible for outbreaks of disease in humans. Novel respiratory pathogens emerge occasionally, and cause outbreaks. Examples of this are the SARS outbreak that occurred in 2003 in South East Asia, and the Middle East Respiratory Syndrome Coronavirus (MERS-CoV) outbreak currently ongoing in the Middle East and SARS-CoV-2 first identified in China in 2019. These pathogens may first be identified as a cluster of people with severe respiratory illness. This category of disease is notifiable in the unusual event of an outbreak of a previously unrecognised/undetected pathogen, or the importation of a pathogen not currently included in the NMC regulations.</p>	<p>The healthcare practitioner responsible for the patient or who has noted a cluster of cases of respiratory illness should notify authorities. Notification should be made immediately on identification of the cluster, or on receipt of a laboratory diagnosis of the novel respiratory pathogen.</p>	<p>A person meeting the case definition for a suspected case of a specific emerging respiratory pathogen e.g., MERS-CoV (see NICD website for specific updated case definitions for emerging pathogens)</p> <p>OR</p> <p>A cluster (e.g., 3 or more cases in 72 hours, or 5 or more cases in a 5-day period) of people with severe respiratory illness (hospitalised or warranting hospitalisation or ICU admission or death) with evidence of common exposure or epidemiologic link. Attention should be given to recent travel or exposure to animals implicated in zoonotic transmission of respiratory pathogens, or exposure to laboratory-confirmed human case/s of an emerging/novel virus</p> <p>OR</p> <p>Suspected zoonotic influenza in humans In the absence of a more likely alternative diagnosis or cause, an acute illness characterised by either: Fever or history of fever AND/OR respiratory symptoms (cough, sore</p>	<p>A person meeting the case definition for a probable case of a specific emerging respiratory pathogen e.g., MERS-CoV (see NICD website for specific updated case definitions for emerging pathogens); OR Person/s (single or from a cluster) satisfying the suspected case definition, with absent or inconclusive laboratory result for a novel or emerging pathogen; AND A close contact of a laboratory-confirmed case</p> <p>OR</p> <p>Probable case of zoonotic influenza A infection A person meeting the case definition for a suspected case AND laboratory confirmation of influenza A infection, but insufficient laboratory evidence to determine subtype</p>	<p>A person with laboratory confirmation of recent infection with a novel (new), emerging pathogen (not previously detected in South Africa) e.g., MERS-CoV or zoonotic influenza A subtypes (e.g. H5, H7, H9) or novel coronavirus.</p>

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		<p>throat, coryza (runny nose) or shortness of breath or difficulty breathing OR conjunctivitis OR sudden severe unexplained illness or death</p> <p>AND one or more of the following exposures in the 14 days prior to symptom onset:</p> <ul style="list-style-type: none"> •Exposure to animals (including birds) or their remains or to environments contaminated by their excreta (faeces, blood, respiratory tract secretions, etc.) in an area where zoonotic influenza A infections in animals or humans have been suspected or confirmed in the past month; •Close contact with a confirmed influenza A infected animal (including sick or dead animals); •Close contact (within 1 metre) with a suspected, probable or confirmed zoonotic influenza A human case; • Consumption of raw or undercooked animal products in an area where zoonotic influenza A infections in animals or humans have been suspected or confirmed in the past month; • Handling samples suspected of containing zoonotic influenza A virus in a laboratory or other setting. 		
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Additional notes

In the event of an outbreak of a novel respiratory pathogen, the NICD will make and confirm the initial diagnosis, and will issue case definitions and laboratory criteria for diagnosis. Influenza H1N1pdm09 (known in the public media as 'swine flu') is NOT a novel respiratory pathogen, and is NOT notifiable.

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***Additional resources**

Additional resources for MERS-CoV, including a FAQ, specimen collection instructions and guidelines may be found at <https://www.nicd.ac.za/diseases-a-z-index/middle-east-respiratory-syndrome-coronavirus/>