

NAME

: XXXXXXXXXX

ID

: XXXXXXXXXX

AGE

: YY

GENDER : X

REFERRED BY

: XXXXXXXXXX

ORDERED ON

: XXXXXXXXX

COLLECTED ON

: XXXXXXXXXX

REPORTED ON

: XXXXXXXXX

ORBITO RESPIRATORY - COMBINED PANEL (1227) (Method: MULTIPLEX RT PCR)	
Specimen	NASOPHARYNGEAL SWAB
INFLUENZA A VIRUS	<u>DETECTED</u>
INFLUENZA B VIRUS	NOT DETECTED
HUMAN RHINO VIRUS	NOT DETECTED
MYCOPLASMA PNEUMONIAE	NOT DETECTED
INFLUENZA A - H1N1	NOT DETECTED
HUMAN BOCAVIRUS	NOT DETECTED
HUMAN METAPNEUMO VIRUSES A AND B	NOT DETECTED
HUMAN RESPIRATORY SYNCYTIAL VIRUSES A AND B	NOT DETECTED
HUMAN ADENOVIRUS	NOT DETECTED
HUMAN PARECHOVIRUS	NOT DETECTED
ENTEROVIRUS	NOT DETECTED
STAPHYLOCOCCUS AUREUS	NOT DETECTED
STREPTOCOCCUS PNEUMONIAE	NOT DETECTED
CHLAMYDOPHILA PNEUMONIAE	NOT DETECTED
HAEMOPHILUS INFLUENZAE B	NOT DETECTED
KLEBSIELLA PENUMONIAE	<u>DETECTED</u>
LEGIONELLA PNEUMOPHILA/ LEGIONELLA LONGBEACHAE	NOT DETECTED
PNEUMOCYSTIS JIROVECII	NOT DETECTED
SALMONELLA SPP.	NOT DETECTED
MORAXELLA CATARRHALIS	NOT DETECTED
HAEMOPHILUS INFLUENZAE	NOT DETECTED
BORDETELLA SPP. except BORDETELLA PARAPERTUSSIS	NOT DETECTED
HUMAN CORONA VIRUSES (HCoV) NL63	NOT DETECTED
HUMAN CORONA VIRUSES (HCoV) 229E	NOT DETECTED



NAME : XXXXXXXXXX REFERRED BY : XXXXXXXXXXX ID : XXXXXXXXXXX ORDERED ON : XXXXXXXXXXX

HUMAN CORONA VIRUSES (HCoV) OC43	NOT DETECTED
HUMAN CORONA VIRUSES (HCoV) HKU1	NOT DETECTED
HUMAN PARAINFLUENZA VIRUSES 1	NOT DETECTED
HUMAN PARAINFLUENZA VIRUSES 2	NOT DETECTED
HUMAN PARAINFLUENZA VIRUSES 3	NOT DETECTED
HUMAN PARAINFLUENZA VIRUSES 4	NOT DETECTED
INFLUENZA C VIRUS	NOT DETECTED

INTERPRETATION

Influenza A virus: Influenza A virus infection is associated with acute respiratory infections of varying severity, ranging from asymptomatic to fatal disease. Typical influenza symptoms include fever, sore throat, cough, headache and myalgia. Complications include primary influenza viral pneumonitis, bacterial pneumonia and exacerbation of underlying chronic conditions. Illness tends to be most severe in the elderly, infants, young children, and immunocompromised hosts.

Influenza B virus: Influenza B virus is a respiratory infection caused by flu viruses. There are three main types of influenza A, B, and C. Types A and B are similar, but influenza B can only pass from human to human.

Influenza A virus H1N1: Influenza A virus H1N1 commonly known as swine flu, is primarily caused by the H1N1 strain of the flu (influenza) virus. H1N1 is a type of influenza A virus, and H1N1 is one of several flu virus strains that can cause the seasonal flu. The signs and symptoms of flu caused by the H1N1 virus are similar to those of infections caused by other flu strains and can include Fever, but not always, Chills, Cough, Sore throat, Runny or stuffy nose, Watery, red eyes, Body aches, Headache, Fatigue, Diarrhea, Nausea and vomiting.

- Human Coronaviruses: Human Coronaviruses are named for the crown-like spikes on their surface. There are four main sub-groupings of coronaviruses known as 229E (alpha coronavirus), NL63 (alpha coronavirus), OC43 (beta coronavirus) and HKU1 (beta coronavirus). People with COVID-19 have had a wide range of symptoms reported ranging from mild symptoms to severe illness. Symptoms may appear 2-14 days after exposure to the virus. Anyone can have mild to severe symptoms. People with these symptoms may have COVID-19: Fever or chills, cough, shortness of breath/difficulty breathing, fatigue, muscle or body aches, headache, loss of taste or smell, sore throat, congestion or runny nose, nausea or vomiting, diarrhoea etc.
- Human Parainfluenza viruses: Human Parainfluenza viruses (Para 1, Para 2, Para 3, Para 4) have been associated with every type of upper and lower respiratory tract illness, including Common cold with fever, Laryngotracheobronchitis, Bronchiolitis and Pneumonia. Para 1 and Para 2 are the pathogens most commonly associated with Croup whereas Para 3 is the pathogen most commonly associated with Bronchiolitis and Pneumonia in infants and young children. Parainfluenza usually spreads from person to person through the air by coughing and sneezing and close personal contact with an incubation period of approximately.
- Mycoplasma pneumonia: Mycoplasma pneumonia bacteria commonly cause mild infections of the respiratory system (the parts of
 the body involved in breathing). The most common illness caused by these bacteria, especially in children, is tracheobronchitis
 (chest cold). Most people with respiratory infections caused by Mycoplasma pneumoniae don't develop pneumonia. For this reason,
 MP is known as an atypical pneumonia and is sometimes called walking pneumonia. A dry cough is the most common sign of
 infection. Other symptoms may be malaise and mild shortness of breath.
- Human metapneumovirus (hMPV) is a negative-sense single-stranded RNA virus of the family Pneumoviridae hMPV has been recognized as an important pathogen for acute respiratory infections in children worldwide and classified into genotypes A and B.

^{*}Human Rhinoviruses: Human Rhinoviruses are the predominant cause of Common cold. They can cause upper and lower respiratory tract infections. Increased testing has recently implicated these viruses in severe infections such as Asthma and COPD. Although infections occur year-round, the incidence is highest in spring and autumn. The two modes of transmission are by respiratory droplets and from contaminated surfaces, including direct person-to-person.



NAME

: XXXXXXXXXX

טו

: XXXXXXXXXX

AGE

: YY

GENDER : X

REFERRED BY

: XXXXXXXXX

ORDERED ON

: XXXXXXXXX

COLLECTED ON

: XXXXXXXXX

REPORTED ON

: XXXXXXXXX

Spread of the virus is most likely to occur by direct or close contact with the respiratory secretions of infected persons. Most people have mild cases of hMPV, but some may have complications such as bronchiolitis, bronchitis and pneumonia.

- Respiratory syncytial virus: Respiratory syncytial virus (RSV) most common cause of bronchiolitis. There are two major antigenic subtypes of human RSV (A and B). People infected with RSV usually show symptoms within 4 to 6 days. RSV is a common respiratory virus that usually causes mild, cold-like symptoms including a Runny nose, a Decrease in appetite, coughing, sneezing, fever, and wheezing.
- Human Adenovirus: Adenoviruses (HAdV) consist of non-enveloped dsDNA and are a common cause of respiratory illness. The symptoms can range from the common cold to pneumonia, croup and bronchitis. Depending on the type, adenoviruses can cause other illnesses such as gastroenteritis, conjunctivitis, cystitis, and less commonly neurological diseases. Adenoviral infections affect infants and young children much more frequently than adults. Severe disseminated infection can occur in immunocompromised subjects.
- Human Bocavirus: Human Bocavirus is described as a human pathogen that causes the common cold. It is associated with lower respiratory tract and gastrointestinal infections, predominantly in children. Transmission probably occurs from respiratory secretions. Symptoms include ARTI (also termed RTIs, acute respiratory tract infections), cough, wheezing, and fever. Cyanosis, Rhinorrhea, Diarrhea, and vomiting. Symptoms usually last 1–2 weeks, but occasionally may be prolonged.
- Enteroviruses: Enteroviruses are positive-sense RNA viruses in the Picornaviridae family. These viruses were initially classified by serotype as Polioviruses (3 types), Echoviruses (31 types, including types 22 and 23, which are now classified as Parechoviruses), Coxsackie virus A (23 types), and Coxsackie virus B (6 types). The normal site of enterovirus replication is the gastrointestinal tract where the infection is typically subclinical. However, in a proportion of cases, the virus spreads to other organs, causing systemic manifestations, including mild respiratory disease (eg, the common cold); conjunctivitis; hand, foot, and mouth disease; aseptic meningitis; myocarditis; and acute flaccid paralysis. Collectively, enteroviruses are the most common cause of upper respiratory tract disease in children. In addition, the enteroviruses are the most common cause of central nervous system (CNS) disease; they account for almost all viruses recovered in culture from spinal fluid. Detection of enterovirus nucleic acid by PCR is also the most sensitive diagnostic method for the diagnosis of CNS Infection caused by these viruses.
- Human Parechovirus: HPeV belongs to the family Picornaviridae and is currently divided into 19 genotypes. HPeV-1 is the most prevalent genotype and most commonly causes gastrointestinal and respiratory disease. HPeV causes systemic illness by spreading hematogenously to other organs, including the brain or liver, that may act as secondary replication sites in a minority of cases.
- Staphylococcus aureus: Staphylococcus aureus is a facultative anaerobic Gram-positive coccus, and it is frequently found as a commensal organism in the respiratory tract and on the skin. These bacteria are spread by having direct contact with an infected person, by using a contaminated object, or by inhaling infected droplets dispersed by sneezing or coughing. This versatile bacterium can invade many tissues and then cause a wide spectrum of infections (cutaneous abscesses, endocarditis, septic shock, etc.).
- Streptococcus pneumoniae: Streptococcus pneumoniae remains the leading cause of bacterial meningitis. It is the commonest cause of meningitis between the ages of 1 and 23 months, and above the age of 19. The nasopharynx is the primary site of colonization, and the vast majority of pneumococcal isolates are encapsulated. In the majority of these people, the bacteria is not growing or active and will not cause illness. However, anyone who carries this bacteria can transmit it to others, potentially causing any of the illnesses or pneumococcal meningitis.
- Chlamydophila Pneumonia Is a type of bacteria that causes respiratory tract infections, such as pneumonia (lung infection). The bacteria cause illness by damaging the lining of the respiratory tract including the throat, windpipe, and lungs. Some people may become infected and have mild or no symptoms. C. pneumoniae can also cause lower respiratory tract infections like bronchitis (inflammation or swelling of the airways that carry air to the lungs) and pneumonia (lung infection). Some reports say that people with pneumonia caused by C. pneumonia are more likely to have laryngitis (inflammation of the voice box) compared to people with other types of bacterial pneumonia. It can take 3 to 4 weeks for symptoms to appear after someone has been exposed to the bacteria. Symptoms can also continue for several weeks after they start.
- Haemophilus influenzae B: Similar to type A, Haemophilus influenzae B is also highly contagious and can have dangerous effects on your health in more severe cases. However, this form can only be spread from human to human.
- Klebsiella pneumoniae: Klebsiella pneumoniae is a Gram-negative, non-motile, encapsulated, lactose-fermenting, facultatively anaerobic, rod-shaped bacterium. Klebsiella bacteria are mostly spread through person-to-person contact. Less commonly, they are spread by contamination in the environment.
- Legionella pneumophila: Legionella pneumophila is a thin, aerobic, pleomorphic, flagellated, non-spore-forming, Gram-negative bacterium of the genus Legionella. L. pneumophila is the primary human pathogenic bacterium. It can cause a serious type of pneumonia (lung infection) called Legionnaires' disease. Legionella bacilli reside in surface and drinking water and are usually transmitted to humans in aerosols. The bacteria multiply intracellularly in alveolar macrophages. Legionnaires' disease is a flu-like



NAME

: XXXXXXXXXX

ID

: XXXXXXXXX

AGE

: YY

GENDER: X

REFERRED BY

: XXXXXXXXX

ORDERED ON

: XXXXXXXXX

COLLECTED ON

: XXXXXXXXX

REPORTED ON

: XXXXXXXXX

syndrome with acute fever, chills, malaise, myalgias, headache, or confusion. Nausea, loose stools or watery diarrhoea, abdominal pain, cough, and arthralgias also frequently occur. Pneumonic manifestations may include dyspnea, pleuritic pain, and hemoptysis.

- Legionella longbeachae: Legionella longbeachae (L. longbeachae) can be found in potting mixes, compost heaps and composted animal manures. How L. longbeachae are spread is uncertain, but it is thought that they are breathed in or spread from hand to mouth. Symptoms include fever, cough, chest pain, breathlessness, and diarrhoea.
- Pneumocystis jirovecii: Pneumocystis Carinii Pneumonia (PCP), referred to as Pneumocystis Jirovecii.Pneumocystis jirovecii is a serious fungal infection that causes inflammation and fluid buildup in the lungs. Transmission occurs through the air. It causes infection in one or both lungs. The most common symptoms of PCP are sudden start of fever, cough, and trouble breathing that often gets worse with activity, dry cough with little or no mucus, and chest discomfort.
- Salmonella: Salmonella infection (salmonellosis) is a common bacterial disease that affects the intestinal tract. Humans become infected most frequently through contaminated water or food. Most people develop diarrhoea, fever and stomach (abdominal) cramps within 8 to 72 hours after exposure.
- Moraxella catarrhalis: Moraxella catarrhalis is a gram-negative diplococcus that commonly colonizes the upper respiratory tract. It is a leading cause of otitis media in children, acute exacerbations of chronic obstructive pulmonary disease (COPD), and acute bacterial rhinosinusitis. Symptoms include discoloured drainage from the nose, high fever, fatigue, swelling in the face, and pain in the forehead or behind the eyes.
- Bordetella pertussis: Bordetella pertussis is a Gram-negative, aerobic, pathogenic, encapsulated coccobacillus of the genus Bordetella, and the causative agent of pertussis or whooping cough. The bacterium is spread by airborne droplets; its incubation period is 7–10 days on average (range 6–20 days). Infection results in colonization and rapid multiplication of the bacteria on the mucous membranes of the respiratory tract. The infection occurs mostly in children under the age of one when they are unimmunized, or children with faded immunity, normally around the ages 11 through 18. The signs and symptoms are similar to a common cold: runny nose, sneezing, mild cough, and low-grade fever.

--- End of the Report ---