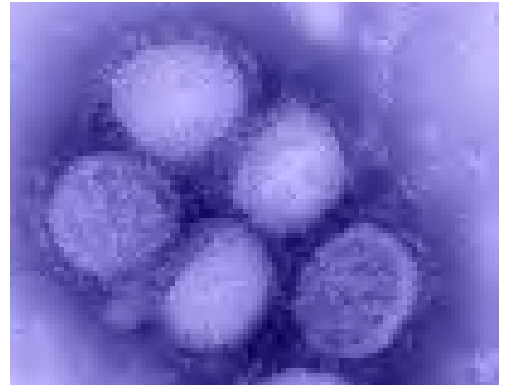


## Influenza Virus

**Influenza virus infection**, one of the most common infectious diseases, is a highly contagious airborne disease that causes an acute febrile illness and results in variable degrees of systemic symptoms, ranging from mild fatigue to respiratory failure and death. These symptoms contribute to significant loss of workdays, human suffering, mortality, and significant morbidity. Influenza results from infection with 1 of 3 basic types of influenza virus—A, B, or C—which are classified within the family Orthomyxoviridae. These single-stranded RNA viruses are structurally and biologically similar but vary antigenically. The most common prevailing influenza A subtypes that infect humans are H1N1 and H3N2.



In 1997, an Avian subtype of influenza A, H5N1, was first described in Hong Kong. In 2008, more than 390 human cases had been documented and more than 246 persons had died following H5N1 outbreaks among poultry and resulting bird-to-human transmission.

On April 26, 2009, the US Department of Health and Human Services issued a nationwide public health emergency regarding Swine Influenza A (H1N1) virus infections in humans. As of early June 2009, H1N1 influenza had infected 28,774 people in 74 countries, and 144 deaths were confirmed to have been caused by the disease.

### Influenza Kits

TV36-100FRT SA, RG, IQ, SC, MX, A, B	<b>Influenza A, B Real-TM</b> Complete Real Time Test with Ribo-Sorb extraction kit	R	CE	100	1 x 10 <sup>3</sup> copies/ml
V36-100FRT SA, RG, IQ, SC, MX, A, B	<b>Influenza A, B Real-TM</b> Real Time Amplification kit	R	CE	100	1 x 10 <sup>3</sup> copies/ml
TR-V33-FRT SA, RG, IQ, SC, MX, A, B	<b>Avian A Screening &amp; Avian H5N1 Typing FRT</b> Complete Real Time Test with Ribo-Sorb extraction kit	R	CE	50	1 x 10 <sup>3</sup> copies/ml
R-V33-FRT SA, RG, IQ, SC, MX, A, B	<b>Avian A Screening &amp; Avian H5N1 Typing FRT</b> Real Time Amplification kit	R	CE	50	1 x 10 <sup>3</sup> copies/ml
TV31-50FRT SA, RG, IQ, B	<b>Avian A Screening &amp; Avian H5 H7 Typing FRT</b> Complete Real Time Test with Ribo-Sorb extraction kit	R		50	1 x 10 <sup>3</sup> copies/ml
V31-50FRT SA, RG, IQ, B	<b>Avian A Screening &amp; Avian H5 H7 Typing FRT</b> Real Time Amplification kit	R		50	1 x 10 <sup>3</sup> copies/ml
TV55-50FRT SA, RG, IQ, SC, MX, A, B	<b>Swine Influenza Virus H1 Real-TM</b> Complete Real Time Test with Ribo-Sorb extraction kit	R	CE	50	5 x 10 <sup>2</sup> copies/ml
V55-50FRT SA, RG, IQ, SC, MX, A, B	<b>Swine Influenza Virus H1 Real-TM</b> Real Time Amplification kit	R	CE	50	5 x 10 <sup>2</sup> copies/ml
TV47-50FRT SA, RG, IQ, SC, MX, A, B	<b>Influenza A H5 H7 H9 Typing FRT</b> Complete Real Time Test with Ribo-Sorb extraction kit	R	CE	50	1 x 10 <sup>3</sup> copies/ml
V47-50FRT SA, RG, IQ, SC, MX, A, B	<b>Influenza A H5 H7 H9 Typing FRT</b> Real Time Amplification kit	R	CE	50	1 x 10 <sup>3</sup> copies/ml
TV54-50FRT SA, RG, IQ, B	<b>Influenza A H1N1 &amp; H3N2 Real-TM</b> Complete Real Time Test with Ribo-Sorb extraction kit	R	CE	50	1 x 10 <sup>3</sup> copies/ml
V54-50FRT SA, RG, IQ, B	<b>Influenza A H1N1 &amp; H3N2 Real-TM</b> Real Time Amplification kit	R	CE	50	1 x 10 <sup>3</sup> copies/ml
TV51-50FRT RG, IQ, SA, B	<b>Parainfluenza Virus Real-TM</b> Complete Real Time Test with Ribo-Sorb extraction kit	R	CE	50	1 x 10 <sup>3</sup> copies/ml
V51-50FRT RG, IQ, SA, B	<b>Parainfluenza Virus Real-TM</b> Real Time Amplification kit	R	CE	50	1 x 10 <sup>3</sup> copies/ml

## Chlamydia & Mycoplasma pneumoniae

*Chlamydomphila* (formerly *Chlamydia*) *pneumoniae* causes mild pneumonia or bronchitis in adolescents and young adults. Older adults may experience more severe disease and repeated infections. Approximately 50% of young adults and 75% of elderly persons have serological evidence of previous infection. The pathogen is estimated to cause 10-20% of community-acquired pneumonia cases among adults. The estimated number of cases of C pneumoniae pneumonia is 300,000 cases per year.

### Chlamydia pneumoniae Kits

TB42-4-50FRT SA, RG, IQ, B	<b>Mycoplasma pneumoniae / Chl. pneumoniae Real-TM</b> Complete Real Time Test with DNA-Sorb-B extraction kit	R		50	5 x10 <sup>2</sup> copies/ml
B42-4-50FRT SA, RG, IQ, B	<b>Mycoplasma pneumoniae / Chl. pneumoniae Real-TM</b> Real Time Amplification kit	R	€€	50	5 x10 <sup>2</sup> copies/ml
B42-4-100FRT SA, RG, IQ, B	<b>Mycoplasma pneumoniae / Chl. pneumoniae Real-TM</b> Real Time Amplification kit	R	€€	100	5 x10 <sup>2</sup> copies/ml
B-175-100F	Chlamydia pneumoniae 269/966 IC	A		110	
B-110-100F	Mycoplasma pneumoniae 697	A		110	

## Pseudomonas

*Pseudomonas* is a gram-negative rod that belongs to the family Pseudomonadaceae. More than half of all clinical isolates produce the blue-green pigment pyocyanin. These pathogens are widespread in nature, inhabiting soil, water, plants, and animals (including humans). *Pseudomonas aeruginosa* has become an important cause of infection, especially in patients with compromised host defense mechanisms. Pseudomonal bacteremia occurs in association with malignancy, chemotherapy, AIDS, burn wound sepsis, and diabetes. It is a frequent cause of nosocomial infections such as pneumonia, endocarditis, meningitis, urinary tract infections (UTIs) and bacteremia.

### Pseudomonas aeruginosa Kits

B76-50FRT SA, RG, IQ, SC, MX, A, B	<b>Pseudomonas aeruginosa Real-TM Quant</b> Real Time Amplification kit	R	€€	50	5 x10 <sup>2</sup> copies/ml
B170-100F	Pseudomonas aeruginosa 309/220 IC	A		110	

## Legionella pneumophila

*Legionella pneumophila* is a thin, pleomorphic, flagellated Gram-negative bacterium of the genus *Legionella*. *L. pneumophila* is the primary human pathogenic bacterium in this group and is the causative agent of legionellosis or Legionnaires' disease. *Legionella pneumophila* (named in memory of the deceased veterans) is ubiquitous to aquatic environments worldwide and resided as an intracellular parasite of amoeba and protozoa provided a link between natural environment and human disease. Thus, environmental monitoring, especially of potable water, cooling towers, and related sources, is a major focus in efforts to control the spread of this disease, which has a 25% of mortality rate.

### Legionella pneumophila Kits

TB50-50FRT RG, SA, IQ, B	<b>Legionella pneumophila Real-TM</b> Real Time Amplification kit with DNA-Sorb-B extraction kit	R	€€	50	5 x10 <sup>2</sup> copies/ml
B50-50FRT RG, SA, IQ, B	<b>Legionella pneumophila Real-TM</b> Real Time Amplification kit	R	€€	50	5 x10 <sup>2</sup> copies/ml

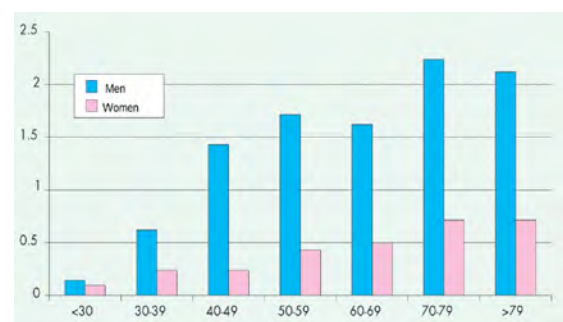


Figure. Incidence of Legionella related to sex and age.

## Human respiratory syncytial virus

**Human respiratory syncytial virus (hRSV)** is a negative-sense, single-stranded RNA virus of the family *Paramyxoviridae*, the most common cause of severe lower respiratory tract disease among infants and young children, typically infects persons by age 2 years and can cause subsequent infections throughout life. RSV infection primarily manifests as bronchiolitis or pneumonia and results in approximately 75,000 to 125,000 hospitalizations in the United States each year. Persons at increased risk for severe disease or death include premature infants, older adults, and persons of any age with compromised respiratory, cardiac, or immune systems.

### hRSV Kits

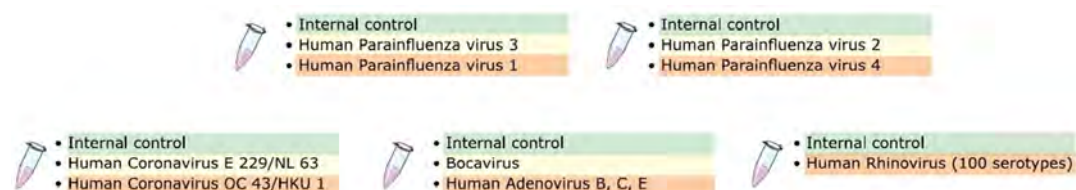
TV37-50FRT RG	<b>hRSV Real-TM</b> Complete Real Time Test with Ribo-Sorb extraction kit	R	€	50	5 x10 <sup>2</sup> copies/ml
V37-50FRT RG	<b>hRSV Real-TM</b> Real Time Amplification kit	R	€	50	5 x10 <sup>2</sup> copies/ml

## Acute Respiratory Viral Infections

ARVI Screen Real-TM

Real Time PCR kit for detection of 11 respiratory pathogens in one clinical sample:

- human parainfluenza virus-1-4 (hPiv) RNA;
- HKUI human coronavirus (hCov) RNA;
- human rhinovirus (hRv) RNA;
- human B, C, and E adenovirus (hAdv) DNA;
- human bocavirus (hBov) DNA



### ARVI Kits

TV57-100FRT SA, RG, IQ, MX, SC, A, B	<b>ARVI Screen Real-TM</b> Multiplex RT-PCR detection and identification of human parainfluenza virus-1-4 (hPiv) RNA; OC43, E229, NL63, and HKUI human coronavirus (hCov) RNA; human rhinovirus (hRv) RNA; human B, C, and E adenovirus (hAdv) DNA; and human bocavirus (hBov) DNA with Ribo-Sorb extraction kit	R	€	100	
V57-100FRT SA, RG, IQ, MX, SC, A, B	<b>ARVI Screen Real-TM</b> Real Time Amplification kit	R	€	100	

## Coronavirus (MERS+SARS)

Coronaviruses are species in the genera of virus belonging to the subfamily Coronavirinae in the family Coronaviridae. Coronaviruses are enveloped viruses with a positive-sense RNA genome and with a nucleocapsid of helical symmetry. The most known human coronavirus, SARS-CoV which causes SARS, has a unique pathogenesis because it causes both upper and lower respiratory tract infections and can also cause gastroenteritis.

### Coronavirus Kits

V65-50FRT SA, RG, IQ, MX, SC, A, B	<b>MERS-CoV Real-TM</b> Real Time Amplification kit for detection and differentiation of MERS-CoV (Middle East Respiratory Syndrome Coronavirus) and SARS-CoV (Severe Acute Respiratory Syndrome Coronavirus)	R	€	50	
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## Bordetella pertussis

Pertussis, also named whooping cough, is a highly contagious bacterial disease caused by *Bordetella pertussis*. Symptoms are initially mild, and then develop into severe coughing, which produce the namesake high-pitched “whoop” sound in infected babies and children when they inhale air after coughing. The coughing stage lasts for approximately six weeks before subsiding.

### Pertussis Kits

B84-100FRT SA, RG, MX, SC, IQ, A, B	<b>Bordetella pertussis/B.parapertussis/B.bronchiseptica Real-TM</b> Real Time Amplification kit	R	CE	100	1 x10 <sup>3</sup> copies/ml
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## Tuberculosis

**Tuberculosis** (abbreviated as TB for tubercle bacillus) is a common and deadly infectious disease caused by mycobacteria, mainly *Mycobacterium tuberculosis*. Tuberculosis most commonly attacks the lungs (as pulmonary TB) but can also affect the central nervous system, the lymphatic system, the circulatory system, the genitourinary system, bones, joints and even the skin. Other mycobacteria such as *Mycobacterium bovis*, *Mycobacterium africanum* and *Mycobacterium microti* can also cause tuberculosis.

Early diagnosis of tuberculosis makes effective treatment possible and increases the probability of clinical outcome owing to quite effective antituberculosis therapy, however the tuberculosis diagnosis has certain difficulties. The application of molecular biology methods allow to overcome the difficulties in the diagnosis of *Mycobacterium tuberculosis*, but due to the biological peculiarities of this microorganism and immune response of human organism, tuberculosis cannot be diagnosed only by one method.

The development of test to differentiate between infection with *Mycobacterium tuberculosis* or *Mycobacterium bovis* and vaccination with *M. bovis* BCG could greatly assist in the diagnosis of early infection as well as enhance the use of tuberculosis vaccines on a wider scale.



### TB Kits

TB15-50FRT SA, RG, IQ, SC, MX, A, B, LC	<b>MTB Real-TM</b> Complete Real Time Test with DNA-Sorb-B extraction kit	R	CE	50	2 x10 <sup>2</sup> copies/ml
B15-50FRT SA, RG, IQ, SC, MX, A, B, LC	<b>MTB Real-TM</b> Real Time Amplification kit	R	CE	50	2 x10 <sup>2</sup> copies/ml
TB41-50FRT SA, RG, IQ, SC, MX, A, B	<b>Mycobacterium tuberculosis Diff Real-TM</b> Complete Test with Magno-Sorb-Tub extraction kit	R	CE	50	5 x10 <sup>2</sup> copies/ml
B41-50FRT SA, RG, IQ, SC, MX, A, B	<b>Mycobacterium tuberculosis Diff Real-TM</b> Real Time Amplification kit	R	CE	50	5 x10 <sup>2</sup> copies/ml
H-3611-50FRT	<b>MTB MDR Real-TM NEW</b> Real Time Amplification kit for detection of MTB antibiotic resistance	R		50	
B-117-100F	MTB complex 218/507 IC	A		110	5 x10 <sup>2</sup> copies/ml