

BD
Respiratory
Viral Panel



Innovation that simplifies. Clinical differentiation that counts.

The BD Respiratory Viral Panel for BD MAX™ System simultaneously detects and differentiates SARS-CoV-2, influenza A, influenza B, and/or respiratory syncytial virus.¹



The hidden burden of RSV

3.2 million

hospitalisations globally in children younger than 5 years²

118 200

deaths globally in children younger than 5 years²

41% to 70%

of hospitalisations in adults with influenza-like illness caused by RSV³

In the U.S., RSV-related infection costs

>\$100M

in elder adults and approximately

\$500M

in children <2 years old⁴

RSV is increasingly recognised as an important public health concern.⁴ Globally, RSV may be responsible for 3.2 million hospitalisations and 118 200 deaths in children younger than 5 years.²

It is the most frequent cause of bronchiolitis in infants^{4,5} and is responsible for more respiratory complications and casualties than COVID-19 or flu in children.^{6,7}

RSV also exacerbates pre-existing respiratory conditions in adults and may cause serious respiratory illness in the elderly.^{4,5} In one study, 41% to 70% of hospitalisations in adults with influenza-like illness and 92% in adults with pneumonia were due to RSV.³

The actual burden among all age groups is likely even higher due to underreporting of RSV infections.⁴

Individuals at highest risk for severe RSV infection include:⁴

- Adults 65 years and older
- Individuals with chronic heart or lung disease
- Individuals with compromised immune systems
- Premature infants and infants aged 6 months and younger





Clinical differentiation matters

SARS-CoV-2, Flu and RSV are 3 major viral respiratory infections with overlapping signs and symptoms making them difficult to differentiate without differential diagnostic testing.^{4,8}

Co-infection with SARS-CoV-2 and other viral respiratory pathogens is not rare and increases disease severity and mortality risk compared to SARS-CoV-2 mono-infection.^{9,10}



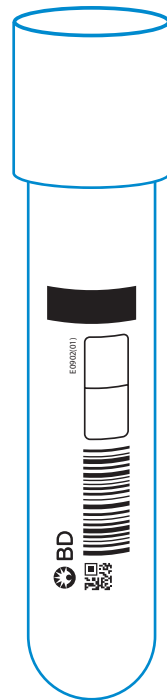
- > The most common viral pathogens co-infecting COVID-19 patients are flu A, RSV and flu B.^{9,11}
- > Co-infection status may influence infection control strategies and treatment recommendations.⁹

Testing is key to confirming the diagnosis, which may help:

- > Manage the spread of infections.¹²
- > Allow continued surveillance.¹²
- > Implement adequate patient management strategies, especially critical for children, elderly, and co-infected patients.^{4,9,10}

4 results, from 1 specimen, in 1 single run

With the BD Respiratory Viral Panel for BD MAX™ System, you can simultaneously detect and differentiate SARS-CoV-2, influenza A, influenza B, and/or RSV from one sample.¹



Identify co-occurring respiratory infections.¹

Provide clinically meaningful results that inform patient management strategies.^{3,4}

- Detect and differentiate if a patient has SARS-CoV-2, influenza A, influenza B and/or RSV.
- Increase testing capacity and help eliminate the need for multiple tests or doctor visits.¹²





Accurate and efficient clinical differentiation

BD Respiratory Viral Panel¹

	SARS-CoV-2	Flu A	Flu B	RSV
Targets	Nucleocapsid phosphoprotein gene (N1 and N2)	Matrix protein M1 gene	Matrix protein M1 gene and HA gene	N and M genes
Clinical Performance	PPA: 98.0% (95% CI: 93.1% – 99.5%) NPA: 98.6% (95% CI: 95.9% – 99.5%)	PPA: 100.0% (95% CI: 92.9% – 100.0%) NPA: 99.6% (95% CI: 97.9% – 99.9%)	PPA: 100.0% (95% CI: 92.9% – 100.0%) NPA: 100.0% (95% CI: 98.6% – 100.0%)	PPA: 96.0% (95% CI: 86.5% – 98.9%) NPA: 100.0% (95% CI: 98.6% – 100.0%)
Sample Types	Anterior nasal swab Nasopharyngeal swab			
Sample Types	BD Universal Viral Transport System Copan Universal Transport Media System			





Streamlined integration into existing workflow with the BD MAX™ System family

- The BD MAX™ System family offers you a fully integrated, automated real-time PCR platform with a broad menu of molecular IVD and open-system tests.¹³
- The automated workflow and analytical performance reduces the need for manual tasks and achieves more rapid results.^{14,15}
- The compact and self-contained unitised reagent strips and the new reclosing septum caps are designed to simplify waste management and reduce the risk of contamination.



Snap

Assemble unitised reagent strips with ready-to-use reagents.



Less than **1.5 minutes** hands-on time per sample^{15,16}

Load

Load Sample Buffer Tubes, Racks, and PCR cartridges.

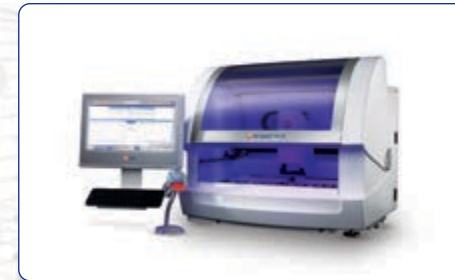


24 patient results in **2 to 3 hours**, on average^{*16}

Go

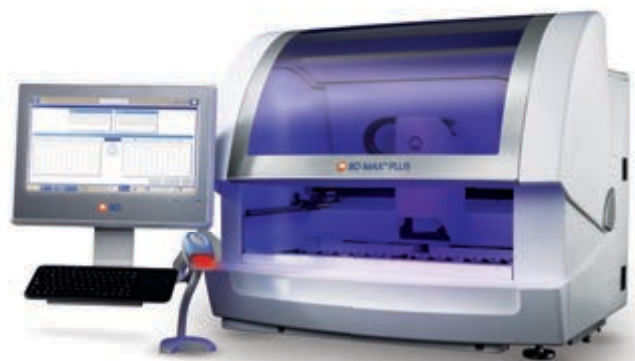
Come back in an average of 2.5 hours for results.*

*Assay times may vary.



96 samples per **8 hour shift**¹⁶

Consolidate your respiratory molecular testing to the BD MAX™ System



BD Respiratory Viral Panel for BD MAX™ System or VIASURE SARS-CoV-2, Flu (A+B) & RSV Real Time PCR Detection Kit for BD MAX™ System

Deliver 4 results in one test.

Cat: 445215 and 444217

BD SARS/Flu for BD MAX™ System

Co-test for SARS-CoV-2 (2 targets) and Flu A/ Flu B.

Cat: 445011

BD SARS-CoV-2 reagents for BD MAX™ System or VIASURE SARS-CoV-2 (N1+N2) Real Time PCR Detection Kit for BD MAX™ System

SARS-CoV-2 detection with 2 targets on N gene, remaining efficient for the detection of variants.

Cat: 445003-01 and 444215

VIASURE SARS-CoV-2 Variant and Variant II Real Time PCR Detection Kits for BD MAX™ System

Identification and differentiation of variants of concern:

Alpha, Beta, Gamma and Delta.

Cat: 444216 and 444218

VIASURE Flu A, Flu B & RSV Real Time PCR Detection Kit for BD MAX™ System

Flexible testing for Flu A, Flu B and RSV when needed.

Cat: 444200

VIASURE *Pneumocystis jirovecii* Real Time PCR Detection Kit for BD MAX™ System

Test for *Pneumocystis jirovecii* alone or as a second master mix with other respiratory assays from the Viasure line.

Cat: 444207

VIASURE *Bordetella* Real Time PCR Detection Kit for BD MAX™ System*

Detection and differentiation of *B. pertussis*, *B. parapertussis* and/or *B. holmesii*.

Cat: 444204

BD MAX™ MDR-TB

Detection of tuberculosis and mutations associated with antibiotic resistance, supported by the WHO.

Cat: 443878

CI, confidence interval; Flu, influenza; IVD, in vitro diagnostics; MDR-TB, multi drug resistant tuberculosis; NPA, negative percent agreement; PPA, positive percent agreement; RSV, respiratory syncytial virus.

* Product availability may vary in different countries; please contact your local BD representative.

References: 1. BD Respiratory Viral Panel for BD MAX™ System Package Insert (P0261). 2. Shi T et al. *Lancet*. 2017;390(10098):946–58. 3. Ali A et al. *Int J Infect Dis*. 2020;90:170–80. 4. NFID. *Respiratory Syncytial Virus (RSV)*. Updated February 2022. Accessed 27 May 2022. <https://www.nfid.org/infectious-diseases/rsv/>. 5. McKimm-Breschkin JL et al. *Antiviral Res*. 2022;197:105227. 6. Encinosa W et al. *JAMA Pediatr*. 2022;176(5):520–2. 7. Wei JS. *Aust J Gen Pract*. 2020;49(10):683–6. 8. CDC. *Similarities and Differences between Flu and COVID-19*. Updated January 2022. Accessed 27 May 2022. www.cdc.gov/flu/symptoms/flu-vs-covid19.htm. 9. Musuuza JS et al. *PLoS One*. 2021;16(5):e0251170. 10. Swets MC et al. *Lancet*. 2022;399(10334):1463–4. 11. Lansbury L et al. *J Infect*. 2020;81(2):266–75. 12. CDC. *CDC's Diagnostic Multiplex Assay for Flu and COVID-19 at Public Health Laboratories and Supplies*. Updated October 2021. Accessed 27 May 2022. <https://www.cdc.gov/coronavirus/2019-ncov/lab/multiplex.html>. 13. BD MAX™ System User's Manual. Becton, Dickinson and Company: Sparks, MD. 14. Mortensen JE et al. *BMC Clin Pathol*. 2015;15:9. 15. Hirvonen JJ et al. *Eur J Clin Microbiol Infect Dis*. 2015;34(5):1005–9. 16. Felder RA et al. *J Lab Autom*. 2014;19(5):468–73.



BD Switzerland Sàrl, Route de Crassier 17, Business Park Terre-Bonne, Batiment A4, 1262 Eysins, Switzerland



The BD MAX™ System, BD Respiratory Viral Panel for BD MAX™ System, BD SARS-CoV-2 Reagents for BD MAX™ System, BD SARS-CoV-2/Flu for BD MAX™ System, VIASURE SARS-CoV-2 (N1+N2) Real Time PCR Detection Kit for BD MAX™ System, VIASURE SARS-CoV-2 Variant Real Time PCR Detection Kit for BD MAX™, VIASURE SARS-CoV-2 Variant II Real Time PCR Detection Kit for BD MAX™, VIASURE SARS-CoV-2, Flu (A+B), RSV Real Time PCR Detection Kit for BD MAX™ System, VIASURE Flu A, Flu B & RSV Real Time PCR Detection Kit for BD MAX™ System, VIASURE *Pneumocystis jirovecii* Real Time PCR Detection Kit for BD MAX™ System, VIASURE *Bordetella* Real Time PCR Detection Kit for BD MAX™ System, BD MAX™ MDR-TB are in vitro diagnostic medical devices bearing a CE mark.

bd.com



BD, the BD Logo and BD MAX are trademarks of Becton, Dickinson and Company or its affiliates. All other trademarks are the property of their respective owners. © 2022 BD. All rights reserved. BD-69857