

## DIAGNOSE RESPIRATORY INFECTIONS WITH THE COMPREHENSIVE RESPIRATORY PANEL

The CDC estimates that during the 2018-19 Influenza (flu) season, there were approximately 37.4 to 42.9 million flu illnesses, contributing to 17.3 to 20.1 million flu-related medical visits and between 531,000 to 647,000 flu-related hospitalizations.<sup>1</sup> Many infections present with similar signs and symptoms, making it difficult to distinguish flu from other viral or bacterial respiratory illnesses.

### COMPREHENSIVE RESPIRATORY PANEL

BioReference's Comprehensive Respiratory Panel enables healthcare providers to improve patient care by providing comprehensive testing for diagnosis and treatment for upper respiratory infections. The panel simultaneously detects 17 viral and 4 bacterial infectious agents that present with similar symptoms.

### COVID-19

The standard Comprehensive Respiratory Panel does not include testing for the detection of SARS-CoV-2 (2019-nCoV). However, we do offer a reflex panel where a fully negative Comprehensive Respiratory Panel will reflex to COVID-19 testing. Please see order details on the next page.

### IMPROVED CLINICAL OUTCOMES

The Comprehensive Respiratory Panel may significantly reduce the duration of antibiotic use, the length of inpatient stay and the time patients spend in isolation.<sup>2</sup> Improved clinical outcomes can result in cost savings, as well as increased patient satisfaction.<sup>3,4</sup>



## VIRUSES TESTED

- Adenovirus
- Coronavirus HKU1
- Coronavirus NL63
- Coronavirus 229E
- Coronavirus OC43
- Human Metapneumovirus
- Human Rhinovirus/  
Enterovirus
- Influenza A
- Influenza A/H1
- Influenza A/H3
- Influenza A/H1-2009
- Influenza B
- Parainfluenza Virus 1
- Parainfluenza Virus 2
- Parainfluenza Virus 3
- Parainfluenza Virus 4
- Respiratory Syncytial Virus

## BACTERIA TESTED

- Bordetella pertussis
- Bordetella parapertussis
- Chlamydia pneumoniae
- Mycoplasma pneumoniae

## TEST HIGHLIGHTS

<b>Test Code and Test Name</b>	L740 - Comprehensive Respiratory Panel M062 - Comprehensive Respiratory Panel with Reflex to COVID-19
<b>Turnaround Time</b>	3 Days
<b>Specimen Requirements</b>	Nasopharyngeal Swab
<b>Custom Collection Instructions:</b>	Nasopharyngeal Swab (NPS) collected according to standard technique and immediately placed in 1-3 mL of Viral transport media. Room temperature for up to 4 hours (15-25 C). Refrigerated for up to 2 days (2-8 C) Frozen for up to 30 days (less than or equal to -15C or less than or equal to -70 C).
<b>Storage Requirements</b>	Refrigerate
<b>Methodology</b>	Polymerase Chain Reaction
<b>CPT Code</b>	87486x1, 87581x1, 87633x1 and 87798x1
<b>Clinical Utility</b>	Assess for various viral and bacterial infectious agents associated with symptomatic upper respiratory infections.

*\*TAT is 24 hours for clients located within the NY/NJ Metropolitan Area; TAT is 48 hours for those outside the NY/NJ Metropolitan Area. May be extended if reflex testing is needed.*

## REFERENCES:

1. Centers for Disease Control and Prevention. 2018-2019 U.S. Flu Season: Preliminary Burden Estimates. <https://www.cdc.gov/flu/about/burden/preliminary-in-season-estimates.htm>. Accessed July 16, 2019
2. Schreckenberger, PC, McAdam, AJ. 2015. Point-counterpoint: Large multiplex PCR panels should be first-line tests for detection of respiratory and intestinal pathogens. J Clin Microbiol 53:3110-3115.
3. Rogers, BB, Shankar, P, Jerris, RC, Kotzbauer, D, Anderson, EJ, Watson, JR, O'Brien, LA, Uwindatwa, F, McNamara, K, Bost, JE. 2015. Impact of a rapid respiratory panel test on patient outcomes. Arch Pathol Lab Med 139:636-641.
4. Xu, M, Qin, X, Astion, ML, Rutledge, JC, Simpson, J, Jerome, KR, Englund, JA, Zerr, DM, Migita, RT, Rich, S, Childs, JC, Cent, A, Del Beccaro, MA. 2013. Implementation of filmarray respiratory viral panel in a core laboratory improves testing turnaround time and patient care. Am J Clin Pathol 139:118-123.
5. Overall performance calculated for BioFire RP2. Data on file, BioFire Diagnostics.

When ordering tests, providers should only order tests that are medically necessary for the diagnosis or treatment of a patient, generally not for screening. Only a few screening tests are covered by most government and third party payors for certain conditions at specific intervals.