



# NOW<sup>®</sup> *S. pneumoniae*

Rapid identification of *Streptococcus pneumoniae*

- Disease caused by *S. pneumoniae* results in widespread illness and mortality worldwide each year.
- Pneumococcal pneumonia is the most common clinical presentation of pneumococcal disease and the most prevalent pneumococcal disease associated with mortality.
- "Globally, *S. pneumoniae* is associated with an estimated 1 million deaths each year in children less than 5 years of age" and with significantly higher mortality rates than viral causes of acute respiratory infections.<sup>2</sup>
- Pneumococcal pneumonia is also a common complication of influenza and measles.

## About *Streptococcus pneumoniae*

*Streptococcus pneumoniae* is transmitted person to person by direct contact with infectious secretions. Acute respiratory tract infections may be viral, bacterial or fungal in origin. Many respiratory diseases present with very similar symptoms, and pneumococcal pneumonia can complicate an acute viral infection. However, "no convincing association has been demonstrated between individual symptoms, physical findings, or laboratory test results and specific etiology".<sup>1</sup>

Typical risk groups for pneumococcal pneumonia include the following:

- Patients with underlying illnesses
- Children under 2 and / or children in day care settings
- Immunocompromised patients
- Elderly

Typical symptoms include:

- Abrupt onset
- Fever and chills
- Cough
- Pleuritic chest pain
- Dyspnea, tachypnea, hypoxia

NOW<sup>®</sup>

- Easy
- Rapid
- Accurate



## Laboratory Identification of *S. pneumoniae*

**Blood Culture** – Blood culture is considered the gold standard. However, it is also recognized as overly restrictive because only 10% to 30% of patients become bacteremic. Blood cultures typically take 24 to 48 hours to provide identification, and samples must be obtained prior to initiation of antimicrobial therapy for maximum sensitivity.

**Sputum Testing** – Sputum Gram stain and culture results are very dependent upon obtaining a good specimen, rapid transport to the laboratory and proper processing in the laboratory within a few hours. Obtaining adequate sputum samples from children is rare. As with blood cultures, these samples must be obtained prior to initiation of antimicrobial therapy.

**Rapid Testing** – Rapid etiologic identification is important to the treatment of pneumonia. Identifying the cause will help assess severity, provide information for optimal antibiotic therapy, help reduce or limit antimicrobial resistance, and potentially reduce antibiotic costs.



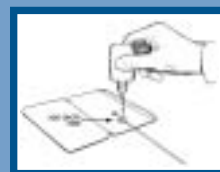
## **NOW<sup>®</sup>** *S. pneumoniae* is a rapid test for the identification of *Streptococcus pneumoniae* using urine samples.

Performing the test is easy.

1. Place sample swab into device.



2. Add reagent to swab, then close device.



3. Read at 15 minutes.



Reading the test couldn't be easier.

One line = negative



Two lines = positive



Sensitivity of 86% & specificity of 94% compared to culture.<sup>3</sup>

### Ordering Information

710-000 Binax NOW *Streptococcus pneumoniae* Urinary Antigen Test (22 test kit)

710-010 Binax NOW *Streptococcus pneumoniae* Urinary Antigen Control Swab Pack



<sup>1</sup> Bartlett JG, et al. Guidelines from the Infectious Disease Society of America: Practice Guidelines for the Management of Community-Acquired Pneumonia in Adults. Clin Inf Dis 2000; 31:347-382.

<sup>2</sup> Schrag SJ, Beall B, and Dowell S. Resistant pneumococcal infections. WHO, 2001.

<sup>3</sup> Binax *Streptococcus pneumoniae* product insert, 2003.