



## **TEST UPDATE: Respiratory Syncytial Virus (RSV) Antigen Effective: January 16, 2007**

**Name:** Respiratory Syncytial Virus Antigen

**Internal Code:** 55071

**CPT Code:** 87420 (EIA, infectious agent)

**Laboratory:** Microbiology

**Availability:** Daily. RSV is seen primarily in the winter months (November to April).

**Related Information:** Collect within 3 days of onset of symptoms for optimal results. Assay detects both viable and non-viable antigen. For more accurate diagnosis, order Virus Culture, Respiratory.

**Synonyms:** RSV Antigen

**Test Commonly Includes:** Rapid screen for RSV.

**Special Instructions:** Proper specimen collection is essential for accurate results. Cells from the infected region must be present in the sample. Antigen tests and viral culture can be performed on the same specimen.

**Turnaround Time:** 1 hour

**Specimen:** SPECIMENS ON SWABS ARE NOT ACCEPTABLE.  
Nasopharyngeal (NP) aspirate  
NP washing

**Volume:** 2-5 ml (optimal)

**Minimum volume:** 500 µl

**Container:** Sterile container or Viral Transport Media (VTM)

**Collection:**

NP wash syringe method:

Fill syringe with saline; attach tubing to syringe tip.

Quickly instill saline into nostril.

Aspirate the recoverable nasal specimen. Recovery must occur immediately, as the instilled fluid will rapidly drain.

In appropriate cases, patients may tilt head forward to allow specimen to drain into suitable sterile container.



If aspirated, inject aspirated specimen from syringe into suitable dry, sterile specimen container.

NP bulb method:

Suction 3-5 ml saline into a new sterile bulb.

Insert bulb into one nostril until nostril is occluded.

Instill saline into nostril with one squeeze of the bulb and immediately release bulb to collect recoverable nasal specimen.

Empty bulb into suitable dry, sterile specimen container.

Vacuum-assisted NP aspirate method:

Attach mucus trap to suction pump and catheter, leaving wrapper on suction catheter; turn on suction and adjust to suggested pressure.

Without applying suction, insert catheter into the nose, directed posteriorly and toward the opening of the external ear.

NOTE: Depth of insertion necessary to reach posterior pharynx is equivalent to distance between anterior nares and external opening of the ear.

Apply suction. Using a rotating movement, slowly withdraw catheter.

NOTE: Catheter should remain in nasopharynx no longer than 10 seconds.

Hold trap upright to prevent secretions from going into pump.

Rinse catheter (if necessary) with approximately 2.0 ml saline, disconnect suction; connect tubing to arm of mucus trap to seal.

**Sampling Time:** Collect within 3 days of onset of symptoms for optimal results.

**Storage Instructions:** Transport immediately **on ice**. Storage conditions if transport time will be exceeded: Store at 2-8°C for up to 24 hours after collection.

**Causes for Rejection:**

QNS

Mucoid specimens

Grossly bloody specimens

**Reference Interval:** Respiratory Syncytial Virus Antigen Negative by Enzyme Immunoassay.

**Use:** Rapid detection of respiratory syncytial virus in clinical specimens

**Critical Values:** Positive results will be called to the ordering physician.

**Methodology:** Enzyme immunoassay (EIA)

**Additional Information:** Assay detects both viable and nonviable antigen.