

KANSAS DEPT OF HEALTH & ENVIRONMENT
Kansas Health & Environmental Laboratories - Virology
Viral Culture Specimen Selection by Clinical Syndrome

Clinical Syndrome/ Symptoms	Suspected Virus(es)	Culture Specimens Accepted	Comments
Cardiac - Endocarditis Myocarditis Pericarditis	Entero, Adeno, Influenza	Myocardial or pericardial biopsy, pericardial fluid, feces, stool swab, rectal swab, throat swab, aspirate or wash, nasopharyngeal (NP) swab, aspirate or wash	Body fluids do not require viral transport medium (VTM). Stool swab or feces preferred to rectal swab. Wash or aspirate tends to have higher viral load than swab.
Congenital/Neonatal Infection	HSV, VZV CMV	Swab of lesion, eye swab, throat swab Urine, amniotic fluid, throat swab	Collect neonatal urine within 7 days post-partum to document <i>in utero</i> infection.
Gastrointestinal - Diarrhea Hepatitis	Entero, Adeno CMV	Feces, stool swab, rectal swab, throat swab, aspirate or wash NP swab, aspirate or wash Urine	Common viral agents responsible for gastroenteritis are not cultivable. Specimen submission for gastroenteritis is not recommended.
Immune-Compromised Patient; e.g., HIV/AIDS, Chemotherapy, Organ transplant recipient	CMV, HSV, VZV	Urine, bronchoalveolar lavage (BAL), throat swab, bronchial wash (BW), lung biopsy Swab of lesion	BAL preferred to bronchial wash, which may contain more upper respiratory tract contaminants and to be more toxic to cell cultures.
Mono-Like Syndrome	CMV	Urine, throat swab	
Mumps	Mumps	Buccal swab, saliva swab, throat swab	Buccal swab is preferred specimen. Urine is no longer recommended for Mumps culture. Notify lab of suspected Mumps.
Neurological - Encephalitis Meningitis	Entero, Mumps (rarely)	CSF, feces, stool swab, rectal swab Buccal swab, CSF	Viral titers tend to be low in CSF. Stool swab or feces preferred to rectal swab. Notify lab of suspected Mumps.
Ocular - Conjunctivitis Keratitis	Adeno, Entero Adeno, HSV, VZV	Conjunctival swab, eye swab, corneal or conjunctival scraping, swab of lesion	Corneal or conjunctival scrapings should be collected by an ophthalmologist.

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Rash - Maculopapular Vesicular	Adeno, Entero, Measles, RSV, Parainfluenza Entero, HSV, VZV	Swab of lesion, throat swab, NP specimen, feces, stool swab, rectal swab	
Respiratory - Bronchiolitis Croup Influenza-Like Illness (ILI) Pharyngitis Pneumonia Rhinitis, Coryza	Influenza, Parainfluenza, RSV Parainfluenza, RSV Adeno, Influenza, RSV, Parainfluenza, HSV Adeno, Entero, HSV Adeno, CMV, Influenza, Parainfluenza, RSV, VZV Adeno, Entero Influenza, Parainfluenza, RSV	<u>Upper Respiratory Illness</u> - Nasopharyngeal aspirate, wash, or swab, nasal aspirate, wash, or swab, combined throat swab and NP swab, throat swab, feces, stool swab, rectal swab <u>Lower Respiratory Illness</u> - BAL, sputum, tracheal aspirate, BW, lung biopsy	NP wash or aspirate and nasal wash or aspirate contain higher viral load than swabs. NP swab preferred to nasal or throat swab. Combined NP/TS is acceptable when collection of NP wash or aspirate is not feasible or tolerated. Nasal wash contains fewer cells than NP wash or aspirate, but is acceptable when NP specimen is contraindicated. BAL preferred to BW, which may contain more upper respiratory tract contaminants and to be more toxic to cell cultures. Sputum is a suitable alternative when bronchial specimen collection is not feasible.
Urogenital - Genital Herpes, Urethritis, Cervicitis	HSV, VZV, Adeno Adeno	Genital swab, swab of lesion, cervical swab, throat swab, NP specimen, feces, stool swab, rectal swab Urine	