

Avian Influenza and MERS-CoV Enhanced Viral Surveillance

North Dakota Department of Health, Division of Disease Control, Updated May 2014



The Division of Disease Control should be notified as soon as possible via phone at 701.328.2378 and within 24 hours regarding patients with applicable symptoms and exposure history.

Criteria for Viral Testing	Respiratory Virus		
	Influenza A H5N1	Influenza A H7N9	Middle East Respiratory Syndrome (MERS)
Signs and Symptoms	Two or more of the following: <ul style="list-style-type: none"> • Fever • Cough • Sore Throat • Rhinorrhea • Nasal Congestion • Body Aches 	Two or more of the following: <ul style="list-style-type: none"> • Fever • Cough • Sore Throat • Rhinorrhea • Nasal Congestion • Body Aches 	All three of the following criteria must be met: <ul style="list-style-type: none"> • Fever ($\geq 100.4^{\circ}\text{F}$) • Cough • Suspicion of pulmonary parenchymal disease (e.g., pneumonia or acute respiratory distress syndrome based on clinical or radiological evidence of consolidation)
Exposure Events/Countries ¹	<ul style="list-style-type: none"> • Return from an area where H5N1 infection has been detected² or where H5N1 viruses circulate in animals; OR • A close contact³ to a <u>symptomatic</u> person with the above risk factor; OR • Persons with unprotected exposure to H5N1 virus in a laboratory setting. 	<ul style="list-style-type: none"> • Return from China; OR • A close contact³ to a <u>symptomatic</u> person with the above risk factor • Persons with unprotected exposure to H7N9 virus in a laboratory setting 	<ul style="list-style-type: none"> • History of travel from the Arabian Peninsula or neighboring countries;⁴ OR • A close contact³ to a <u>symptomatic</u> person with the above risk factor.
Exposure Timeline	Within 10 days prior to illness onset.	Within 10 days prior to illness onset.	Within 14 days prior to illness onset.
Specimens to be Collected and Submitted to the North Dakota Division of Laboratory Services (Laboratory phone: 701-328-6272)	Preferred <ul style="list-style-type: none"> • Nasopharyngeal (NP) swab⁵ Secondary <ul style="list-style-type: none"> • Oropharyngeal (OP) swab⁵ 	Preferred <ul style="list-style-type: none"> • NP swab⁵ Secondary <ul style="list-style-type: none"> • OP swab⁵ 	Preferred ⁶ <ul style="list-style-type: none"> • Lower respiratory tract aspirate/wash or sputum (induced sputum is acceptable). Secondary ⁶ <ul style="list-style-type: none"> • NP swab⁵ <u>AND</u> OP swab⁵; serum or stool.

¹ At the discretion of NDDoH, exposure to similar events or countries in the vicinity of those specifically named may be approved for testing.

² Countries with H5N1: Azerbaijan, Bangladesh, Cambodia, Canada, China, Djibouti, Egypt, Indonesia, Iraq, Lao People's Democratic Republic, Myanmar, Nigeria, Pakistan, Thailand, Turkey, and Viet Nam

³ Close contact is defined as providing care of the ill patient, or having similar close physical contact; or who stayed at the same place (e.g., lived with or visited the patient when the patient was ill).

⁴ Countries considered in the Arabian Peninsula and neighboring countries include: Bahrain, Iraq, Iran, Israel, Jordan, Kuwait, Lebanon, Oman, Palestinian Territories, Qatar, Saudi Arabia, Syria, the United Arab Emirates (UAE), and Yemen.

⁵ Use only synthetic fiber swabs with plastic shafts. Do not use calcium alginate swabs or swabs with wooden shafts.

⁶ Specimens may be held at 2-8°C for up to 72 hours. If a delay in extraction is expected, store specimens at -70°C and ship on dry ice.

For more information on precautions for health care workers in contact with suspected or confirmed cases please contact Disease Control or see: Centers for Disease Control and Prevention, novel influenza for health care workers: <http://www.cdc.gov/flu/avianflu/h7n9-infection-control.htm>
Centers for Disease Control and Prevention, MERS for health care workers: <http://www.cdc.gov/coronavirus/mers/infection-prevention-control.html>