Louisiana Office of Public Health Laboratories	
Test Name	Mumps Virus rRT-PCR
PHL Location	Office of Public Health Laboratory Baton Rouge
CPT Code	**87798 -** Infectious agent detection by nucleic acid (DNA or RNA), not otherwise specified; amplified probe technique, each organism
Synonyms	Mumps
Brief Description of Test	The Mumps rRT-PCR assay is used on the ABI 7500 Fast Dx Real-Time PCR Instrument. The primer and probe sets are designed for the detection of the Mumps N Gene and Human RNase P mRNA (a cellular reference gene). The Mumps Real-Time RT-PCR assay consists of oligonucleotide primers and dual-labeled hydrolysis probes which may be used in real-time RT-PCR assays for the in vitro qualitative detection of mumps virus RNA in buccal, NP or throat swabs in viral transport. CSF is an acceptable specimen type in the case of suspect mumps meningitides/encephalitis. The primer and probe sets in the assay are designed for the detection of the mumps virus N gene and the human RNase P gene.
Possible Results	**Result** Positive – Mumps RNA detected Equivocal for Mumps RNA. Consider collecting a serum specimen for Mumps serology. Inconclusive. Consider collecting a second specimen for PCR and a serum specimen for Mumps serology. Negative – Mumps RNA not detected.
Reference Range	Negative
Specimen Type	Buccal swab Nasopharyngeal (NP) swab Throat swabs
Specimen Container(s):	Viral Transport Media (VTM) tubes

Minimum volume accepted:	Request 1 mL 100 µL per extraction
Collection Instructions	Specimens collected within 3 days of parotitis onset will yield the best results. Specimen Container – VTM or Screw Cap Aliquot Label specimen with Patient Name and a 2nd unique identifier such as a chart number or medical record number. DOB is not considered unique. Complete a Lab Form 96 to accompany the sample. Lab submission form must be thoroughly completed with patient's first and last name, 2nd patient identifier, gender, date of birth, date of collection, time of collection, test requested, and submitter's name, address, and contact number. The same two unique identifiers **MUST** be recorded on the tube **AND** the Lab 96 form. Transport specimen to laboratory as soon as possible after collection. Keep submission forms insulated from specimens. See CDC website for video of buccal swab collection instructions: https://www.cdc.gov/mumps/lab/specimen-collect.html
Storage and Transport Instructions	2-8°C for 1 day
Causes for Rejection	• Received outside acceptable transport conditions • Incorrect source • Incorrect labeling • Expired collection tubes • Not approved for testing by Infectious Disease Epidemiology
Limitations of the Procedure	Successful detection of mumps virus depends primarily on the timing of collection and quality of the clinical sample. Vaccinated individuals may shed virus for a shorter period and might shed smaller amounts of virus, thus degradation of the sample has greater consequences for successful detection of virus.
Interfering Substances	A positive rRT-PCR result provides laboratory confirmation of mumps infection in persons with symptoms consistent with mumps who have not been vaccinated within the preceding 45 days.
References	CDC Procedure – Real-time (TaqMan®) RT-PCR Assay for the Detection of Mumps Virus RNA in Clinical Samples (April 2010)
Additional Information	Before shipping, notify the Infectious Disease Epidemiology or the Immunization Program

Release Date	05/18/2018

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