

# Quantabio in Public Health

Quantabio is committed to supporting molecular testing for public health applications with our ToughMix PCR, qPCR and RT-qPCR reagents. Since 2013, Quantabio products have been cited in testing protocols for viruses such as H7N9 Avian Influenza, Polio and COVID-19 and bacteria such as Legionella spp., Mycoplasma pneumoniae and Shiga toxin producing E. coli. These protocols are continually expanded to include new pathogens, or improve previous assays.

## Detection and surveillance of viruses

### **CDC Human Influenza Virus Real-Time RT-PCR Diagnostic Panel**

Centers for Disease Control and Prevention

[https://www.accessdata.fda.gov/cdrh\\_docs/pdf13/K130551.pdf](https://www.accessdata.fda.gov/cdrh_docs/pdf13/K130551.pdf)

### **CDC 2019-Novel Coronavirus (2019-nCoV) Real-Time RT-PCR Diagnostic Panel**

Centers for Disease Control and Prevention

<https://www.fda.gov/media/134922/download>

### **Polio Eradication Initiative, Poliovirus rRT-PCR ITD 4.1 Addendum Kit**

World Health Organisation, Global Polio Eradication initiative

<https://polioeradication.org/wp-content/uploads/2020/01/GPLN-GP2-appendix-English.pdf>

### **Multiplex Real-Time Reverse Transcription PCR for Influenza A Virus, Influenza B Virus, and Severe Acute Respiratory Syndrome Coronavirus 2**

Shu B, Kirby MK, Davis WG, Warnes C, Liddell J, Liu J, et al. (CDC)

Emerg Infect Dis. 2021;27(7):1821-1830.

<https://doi.org/10.3201/eid2707.210462> PMID: 34152951

### **Molecular Genotyping of Hepatitis A Virus, California, USA, 2017–2018**

Shu B, Kirby Probert WS, Gonzalez C, Espinosa A, Hacker JK. (California dept. Public Health)

Emerg Infect Dis. 2019;25(8):1594-1596.

<https://doi.org/10.3201/eid2508.181489> PMID: 31310213

### **Tracking SARS-CoV-2 in Sewage: Evidence of Changes in Virus Variant Predominance during COVID-19 Pandemic**

Martin J, Klapsa D, Wilton T, Zambon M, Bentley E, Bujaki E, Fritzsche M, Mate R, Majumdar M. (Public Health England)

Viruses. 2020 Oct 9;12(10):1144.

<https://doi.org/10.3390/v12101144> PMID: 33050264

### **Three Years of Shared Service HIV Nucleic Acid Testing for Public Health Laboratories: Worthwhile for HIV-1 but Not for HIV-2**

Styer LM, Gaynor AM, Parker MM, Bennett SB, Wesolowski LG, Ethridge S, Chavez PR, Sullivan TJ, Fordan S, Wroblewski K. (New York State Department of Health)

Sex Transm Dis. 2020 May;47(5S Suppl 1):S8-S12.

<https://doi.org/10.1097/OLQ.0000000000001123> PMID: 31876868

## Detection of arboviruses in mosquitoes: Evidence of circulation of chikungunya virus in Iran

Bakhshi H, Mousson L, Moutailler S, Vazeille M, Piorkowski G, Zakeri S, Raz A, de Lamballerie X, Dinparast-Djadid N, Failloux AB (INSERM, FR)  
 PLoS Negl Trop Dis. 2020 Jun 30;14(6):e0008135  
<https://doi.org/10.1371/journal.pntd.0008135> PMID: 32603322

### Detection and surveillance of bacteria

## Expanded sequential quadriplex real-time polymerase chain reaction (PCR) for identifying pneumococcal serotypes, penicillin susceptibility, and resistance markers

Velusamy S, Tran T, Mongkolrattanothai T, Walker H, McGee L, Beall B. (CDC)  
 Diagn Microbiol Infect Dis. 2020 Jun;97(2):115037.  
<https://doi.org/10.1016/j.diagmicrobio.2020.115037> PMID: 32265073

## Whole genome sequence based capsular typing and antimicrobial resistance prediction of Group B streptococcal isolates from colonized pregnant women in Nigeria

Bob-Manuel M, McGee L, Igunma JA, Alex-Wele MA, Obunge OK, Wariso KT. (CDC)  
 BMC Genomics. 2021 Aug 23;22(1):627.  
<https://doi.org/10.1186/s12864-021-07929-z> PMID: 34425756

## Simultaneous Detection and Differentiation of Clinically Relevant Relapsing Fever *Borrelia* with Semimultiplex Real-Time PCR

Dietrich EA, Replogle AJ, Sheldon SW, Petersen JM. (CDC)  
 J Clin Microbiol. 2021 Jun 18;59(7):e0298120  
<https://doi.org/10.1128/JCM.02981-20> PMID: 33910966

## Whole-Genome Single-Nucleotide Polymorphism (SNP) Analysis Applied Directly to Stool for Genotyping Shiga Toxin-Producing *Escherichia coli*: an Advanced Molecular Detection Method for Foodborne Disease Surveillance and Outbreak Tracking

Singh N, Lapierre P, Quinlan TM, Halse TA, Wirth S, Dickinson MC, Lasek-Nesselquist E, Musser KA. (New York State Department of Health)  
 J Clin Microbiol. 2019 Jun 25;57(7):e00307-19.  
<https://doi.org/10.1128/JCM.00307-19> PMID: 31068414

## Occurrence of *Campylobacter* spp., *Salmonella* spp. and shiga toxin-producing *Escherichia coli* in inline milk filters from Swedish dairy farms

Flink, C, Nyberg, K. (Swedish Food Agency)  
 J Food Saf. 2020; 40:e12726.  
<https://doi.org/10.1111/jfs.12726>

## Use of Real-Time PCR for *Chlamydia psittaci* Detection in Human Specimens During an Outbreak of Psittacosis - Georgia and Virginia, 2018

McGovern OL, Kobayashi M, Shaw KA, et al. MMWR Morb Mortal Wkly Rep 2021;70:505–509.  
<http://dx.doi.org/10.15585/mmwr.mm7014a1> PMID: 33830980

Quantabio products are intended for molecular biology applications. The products are not intended for the diagnosis, prevention or treatment of a disease.

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