



www.esr.cri.nz/laboratory-test-catalogue/

ESR HEALTH TESTING AND ANALYSIS

From investigating food contamination to identifying the pathogens that cause disease, ESR scientists undertake a range of testing in our accredited laboratories across the country.



ESR – Kenepuru Science Centre testing services

Antimicrobial Resistance: Open correct form [here](#)



Antimicrobial resistance gene detection by PCR, sequencing and genomic analysis

Confirmation of acquired carbapenemase

Molecular typing of nosocomial pathogens

Reference phenotypic antimicrobial susceptibility testing

Staphylococcus aureus spa typing

Staphylococcus aureus toxic shock syndrome toxin-1, enterotoxin and exfoliative toxin detection by PCR

Environmental and Food Virology

(fees may apply for non-MoH work)

Open form [here](#) for single human requests (*Clinical samples*)



Open form [here](#) for non-human single specimen requests (*Commercial samples*)



Recovery of enteric viruses from:

Wastewater

Shellfish

River water

Drinking water

Biosolids

Fresh produce and berry fruits

Other environmental samples on request

Molecular detection (and molecular typing where possible) including:

Norovirus

Rotavirus

Adenovirus

Hepatitis A virus

Enterovirus

SARS-CoV-2 (from wastewater only)

F-RNA bacteriophage

Detection and quantitation by culture methods:

Adenovirus

Enterovirus

Environmental Microbiology:

(fees may apply for non-MoH work)

Open correct form [here](#)



Legionella isolation from:

Cooling tower and other industrial water systems (water and biofilm)

Dental and medical devices using water (e.g., high-speed drills, heater-cooler units, humidifiers)

Potable and non-potable water systems (water and biofilm)

Rainwater collection systems

Recreational water systems e.g., spa pools (water and biofilm)

Soil, sludge, compost, mulch, and potting mix



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ESR HEALTH TESTING AND ANALYSIS – 2

ESR – Kenepuru Science Centre testing services

Environmental Microbiology:

(fees may apply for non-MoH work)

Open correct form [here](#)



NTB mycobacteria isolation from:

- Potable water systems (water and biofilm)
- Recreational water system (water and biofilm)
- Medical equipment (e.g., humidifiers, heater-cooler units)

Pseudomonads isolation from:

- Potable water systems (water and biofilm)
- Medical equipment (heater-cooler units, dental water lines)

Heterotrophic Plate Count (21°C & 37°C)

- Recreational waters (eg: spa pools)

Legionella clinical:

Open form [here](#)



- Legionella culture identification
- Legionella detection and typing by PCR and DNA sequencing
- Legionella IFA test (serology)
- Legionella isolation and identification from clinical specimens
- Molecular typing of Legionella
- NGS of Legionella

Invasive Pathogens:

Open form [here](#)



- Haemophilus influenzae type b gene detection
- Group A streptococcus emm typing
- Streptococcus pneumoniae capsular typing
- Neisseria meningitidis characterisation

Special Bacteriology:

Open form [here](#)



- Corynebacterium diphtheriae/ulcerans toxin gene detection
- Listeria monocytogenes characterisation
- Identification of aerobic non-enteric bacteria *(fee for service)*





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ESR HEALTH TESTING AND ANALYSIS – 3

ESR WALLACEVILLE SCIENCE CENTRE

Enteric and Leptospirosis Reference Laboratory

Ministry of Health requirement to refer isolates from clinical cases



Whole genome sequencing typing and virulence factor detection:

Open form [here](#) for single human requests (*Clinical samples*)



Open form [here](#) for non-human single specimen requests (*Commercial samples*)



Shiga toxin producing *Escherichia coli* #

Salmonella enteritidis #

Shigella species #

Vibrio cholerae (toxin gene detection within 24 hours) #

Vibrio parahaemolyticus #

Yersinia enterocolitica #

Suspected foodborne illness investigation

Open form [here](#)



Leptospira serology (MAT testing)

Open form [here](#)



Clinical virology

Influenza:

Open form [here](#)



Influenza PCR for AH1, AH3, AH5, AH7, AH9 and B lineage typing

Influenza viral isolation

Influenza antigenic typing

Influenza antiviral susceptibility to oseltamivir and zanamivir (phenotypic)

Influenza A and B whole genome sequencing

Poliovirus:

Open form [here](#)



Poliovirus isolation for suspected acute flaccid paralysis samples

Poliovirus neutralising antibody detection

Poliovirus intratypic differentiation by PCR

Poliovirus VP1-based sequencing

Mosquito borne viruses:

Open form [here](#)



Barmah forest virus IgM and IgG serology

Chikungunya virus IgM and IgG serology

Chikungunya virus PCR

Dengue fever virus NS1 antigen

Dengue fever virus IgM and IgG serology

Dengue fever virus PCR

Dengue fever virus serotyping PCR

Ross River virus IgM and IgG

Japanese encephalitis IgM and IgG serology

Zika virus IgM and IgG serology

Zika virus PCR

West Nile virus IgM and IgG serology

Culture of:

Open form [here](#)



Influenza

Enterovirus

Adenovirus

SARS-CoV-2 (PC3)

Mpox (PC3)



Salmonella



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ESR HEALTH TESTING AND ANALYSIS – 4

ESR WALLACEVILLE SCIENCE CENTRE

Other services:

Open form [here](#)



Enterovirus PCR and serotyping

Adenovirus PCR and serotyping

Respiratory virus detection PCR (Adeno, RSV, hMPV, Parainfluenza, enterovirus, rhinovirus and SARS-CoV-2)

RSV genotyping and whole genome sequencing

Mpox detection PCR including clade typing

Seasonal coronavirus detection PCR

Filovirus detection PCR

Blood borne virus:

Open form [here](#)



HBsAg EIA neutralisation

HBcAb Total

HBc IgM Ab

HBV DNA viral load (quantitative)

Anti-HCV confirmation testing

HCV RNA viral load (quantitative)

Anti-HDV IgG

HIV-1 & 2 confirmation testing

HTLV-1 & 2 antibody testing

CONTACT DETAILS

Kenepuru Science Centre

Laboratory opening hours:

8am to 5pm, Monday to Friday.

T: +64 4 914 0700

NB: Our Kenepuru site is currently accessed via Bluff Road

34 Kenepuru Drive, Kenepuru, Porirua 5022

PO Box 50348, Porirua 5240, Aotearoa New Zealand

Wallaceville Science Centre

Laboratory opening hours:

8am to 5pm, Monday to Friday.

T: +64 4 529 0600

66 Ward Street, Wallaceville, Upper Hutt 5018

PO Box 40158, Upper Hutt 5140, Aotearoa New Zealand

