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Working During a declared Pandemic Ground water and Lakes (Peter Hurn)

Overview

This procedure was developed during the COVID-19 Pandemic of 2020. This should be read in conjunction with other SOP's, official government advice and Horizons Emergency Management directives. This document applies to Groundwater and Lake Level sampling and is primarily the work Peter Hurn does. This appendix focus is purely Groundwater and Lakes. For other department activities please refer to your other procedures (Environmental data cd_om_1.8 Pandemic work)

Risk Analysis

Current knowledge

- Currently, the incubation period of COVID-19 is assessed to be between 2 and 14 days.
- This means that if a person remains well 14 days after contact with someone who has coronavirus, they are not contagious (it is possible to have contracted the disease but remain asymptomatic).
- Infection can be spread to people who are nearby (within 2 meters) such that droplets could be inhaled into the lungs.
- It is also possible that someone may become infected by touching a surface, object or the hand of an infected person that has been contaminated with respiratory secretions and then touching their own mouth, nose, or eyes (such as touching door knob or shaking hands then touching own face)
- Covid-19 is highly infectious
- Covid-19 can cause serious illness and death

What are the symptoms?

Symptoms of COVID-19 are similar to a range of other illnesses such as influenza and do not necessarily mean that you have COVID-19. Symptoms include:

- Fever
- Sneezing
- Coughing
- Temporary loss of smell
- Sore throat
- Runny Nose
- **Difficulty breathing.**



Difficulty breathing is a sign of possible pneumonia and requires immediate medical attention.

General

During the Pandemic it will not be business as usual. Essentially during level four all water quality programmes are suspended. During Level three programmes will start being brought online. This plan will change as we proceed through the levels and as more information come through.

- Working from home except of course approved field work
- One person per truck
- Management approval to start a run (Get Home safe tracking essential)
- In level three, any ground water sites that are used or could be used for drinking water will not be sampled. (This will be reviewed in level 2)
- Only one person in the lab calibrating and preloading chilly bins
- Peter Hurn has permission from Wayne Spenser to enter the Marton Depot. However he must fill in the excel log sheet in the Marton Teams channel before going in
- No "Cold calling" ring ahead of time and gain permission of land owners

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Before conducting field work

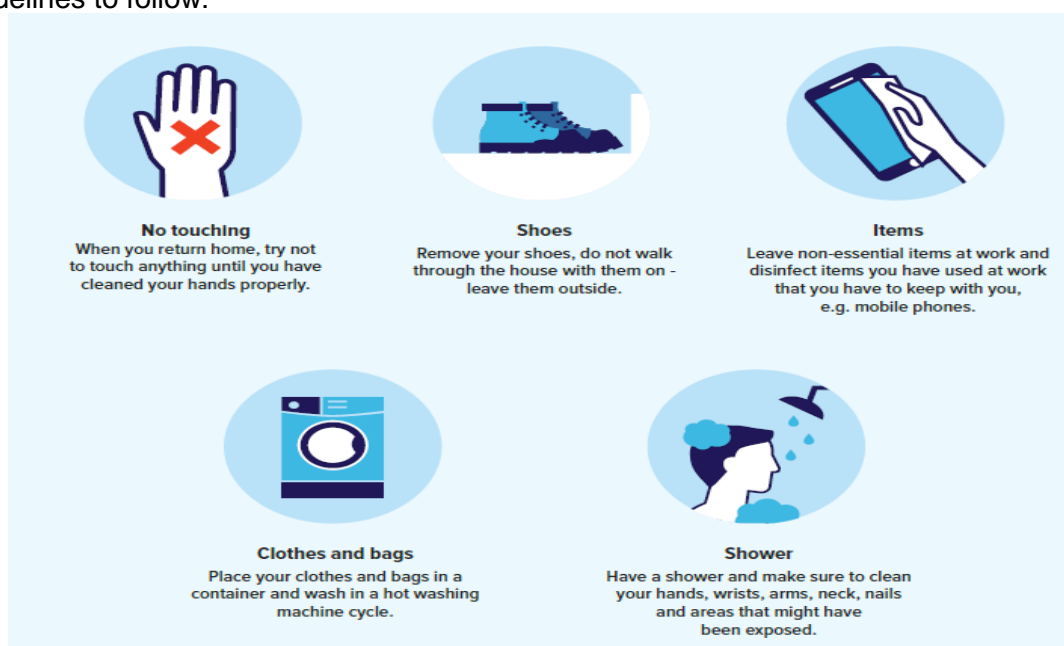
- Staff that need to work in the field must obtain permission from their Manager / Team Leader or nominated person of planned locations and approximate time of return to office or home. Peter Hurn to email Brent Watson and David Brown his work plan and receive an approved email from Brent before starting work. (Normally at least the day before).
- Call the occupier or land owner before visiting the site:
 - confirm access time and date;
 - **for groundwater sites confirm the bore is not being used for drinking water we do not sample from bores that are used for drinking water or it is unknown;**
 - check if anyone will be in close proximity to area of work;
 - explain what work you intend doing and the precautions you will take.
- If you are visiting sites controlled by other PCBU's you must follow their protocols at all times, unless their standards are less than is required by the Council's procedures.
- If the site is in a public place, also sanitise all contact points on the shared external surfaces such as gates, latches etc, both on entry and exit.

Contract tracing

As a staff member working in the field, you MUST keep a daily record of who you have been in contact with in relation to your Council work – if you are identified as a close contact of someone with COVID-19, you will need to be able to provide this information to the Ministry of Health to enable contact tracing.

Returning home

To stop the possible spread of COVID-19, it is important that when you return home after work, you take all the necessary precautions to ensure that you and everyone in your bubble are safe. Here are five simple guidelines to follow:



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Storage and use of vehicles

Pandemic Level	Operating principles
2 or Less	BAU
3	Keep vehicle full with fuel, and clean ready for repurposing in case of level 4 escalation. Sanitise hands with regularly, when entering vehicles. Store vehicles at your private residence unless directed otherwise. Vehicles are to be cleaned and high contact areas (steering wheel, hand brake, door handles) sanitised at the end of each day.
4	Store vehicles at your private residence unless directed otherwise. Use only the single vehicle assigned to you. Do not swap vehicles unless you are authorised to. Do not access other vehicles for the purpose of sourcing equipment and spares, ask the person who is assigned that vehicle to do this for you if needed.

Accessing Water Quality Lab / Marton Depot during Pandemic

Pandemic Level	Operating principles
2 or Less	BAU: consider others, they may still wish to exercise physical distancing. Stay away if you have flu like symptoms.
3	The Regional House Laboratory is a confined space with little room to Physical distance. During Level three the Lab access will be strictly limited. Ordinarily only one person will be nominated each day to access the Lab. This person will load all chilly bins and calibrate the SmartTrolls for all runs except Peter Hurns. Peter Hurn can continue to calibrate in Marton. Peter to complete the excel spread sheet in the Marton Teams channel to record his movements in the Marton Depot.
4	Management / EOC approval is required prior to entering an HRC office, the WQ Lab, or any depot for any reason. Accessing an HRC office, WQ Lab, or depot will be considered as a last resort and be undertaken by named essential staff only. Plan and prepare to reduce need to access an office or depot space. All effort needs be made to control the spread of the virus. Wash or disinfect hands prior to entering the office. Lakes and Groundwater runs are cancelled. Treat both yourself and every surface as though they are infected. Avoid using bathroom and kitchen facilities where possible. Avoid touching surfaces with hands, sanitise your hands have before and after entering an office or room. Always cough into your arm or a tissue and discard tissue responsibly. Movements in and out of HRC offices will be monitored by EOC.

Staff or public contact during pandemic

Pandemic Level	Operating principles
2 or Less	BAU: consider others, they may still wish to exercise physical distancing. Stay away if you are feeling unwell.
3	Limit face to face meetings. Where possible keep to the 2 metre physical distancing guidelines. Wash hands with soap regularly. Maintain a log of all contacts for possible contact tracing. Use the Get Home Safe App and use the manual check in feature. Note: the name of person or meeting that took place.
4	Management / EOC approval is required prior to staff having direct contact with the public. This approval may simply be for the duties you need to carry out. When approved staff are to follow strict physical distancing for any person who does not belong to your bubble (those you currently live with). Do not stand closer than 2m from anyone, if windy double this distance, or ensure there is a cross wind. Maintain a log of these face to face encounters and who you have met with. Wash hands thoroughly with soap regularly.

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Accessing office/depot during pandemic

Pandemic Level	Operating principles
2 or Less	BAU: consider others, they may still wish to exercise physical distancing. Stay away if you have flu like symptoms.
3	Work from home where possible. Exercise physical distancing. Stagger smoko breaks. Limit face to face meetings. Permission from Brent Watson is required For Marton, fill in the excel spreadsheet in Teams .
4	Management / EOC approval is required prior to entering an HRC office or depot for any reason. Accessing an HRC office or depot will be considered as a last resort and be undertaken by named essential staff only. Plan and prepare to reduce need to access an office or depot space. All effort needs be made to control the spread of the virus. Wash or disinfect hands prior to entering the office. Restrict access to one external door and minimise movements within the building. Treat both yourself and every surface as though they are infected. Avoid using bathroom and kitchen facilities where possible. Avoid touching surfaces with hands, sanitise your hands have before and after entering an office or room. Always cough into your arm or a tissue and discard tissue responsibly. Movements in and out of HRC offices will be monitored by EOC.

Accessing monitoring sites during pandemic

Pandemic Level	Operating principles
2 or Less	BAU: consider others, they may still wish to exercise physical distancing. Stay away if you are feeling unwell. Use the get home safe app every time you are in the field.
3	A risk assessment needs to be done prior to visiting any site taking into consideration likely C19 transmission hot spots such as gates, handrails etc. Urban monitoring stations likely pose a higher risk due to movements of people out exercising etc. Only one person to be in a vehicle at any one time. Try to limit Vehicles to dedicated drivers only. Limit face to face meetings. Where possible keep to the 2 metre physical distancing guidelines. Wash hands with soap regularly. Use the Get home safe app to report your duties and intended time that you will be safely home. No "Cold Calling" call ahead and gain permission from land owners. Try to keep runs to regular staff members consider runs that require inductions and ensure only inducted staff perform those runs.
4	<p>Authorisation needs to be obtained from the department data manger or deputy before visiting any site. Only priority sites are to be visited (Flood warning, IVR, critical webcams, and supporting infrastructure). A risk assessment needs to be done prior to visiting any site taking into consideration likely C19 transmission hot spots such as gates, handrails etc. Urban monitoring stations likely pose a higher risk due to movements of people out exercising etc. Only one person to be in a vehicle at any one time. Try to limit Vehicles to dedicated drivers only.</p> <p>Make an effort to contact landowners especially if you need to pass through a number of paddocks etc.</p> <p>Wash hands with soap and water prior to accessing a site.</p> <p>Where practical, access site via the nearest public road, duck through fences rather than having to touch gates. If opening a gate is unavoidable, disinfect gate after touching. Wash hands thoroughly prior to leaving each site. Wash hands thoroughly with soap regularly.</p>

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Refuelling vehicle during pandemic

Pandemic Level	Operating principles
2 or Less	BAU: consider others, they may still wish to exercise physical distancing. Stay away if you are feeling unwell.
3	Keep vehicle full with fuel in case of level 4 escalation. Wash hands with soap regularly. Where possible refuel locally, before leaving for a day in the field.
4	<p>Please take care in all areas where there is higher levels of 'people traffic' such as petrol stations. Try to refuel at the same fuel station near to your home. Ensure tank is full at the start or end of a day before leaving your local area.</p> <p>Priority should be given to unmanned petrol stations to reduce human contact (do our fuel cards work at these?) Wash hands prior to touching anything at a petrol station.</p> <p>Open fuel cap. If pump attendants are present let them insert put pump nozzle and inform attendant that you will close the fuel cap yourself.</p> <p>Where possible use corner of fuel card to push eftpos buttons. Check fuel cap is closed, wash or disinfect both hands and fuel card before re-entering vehicle.</p>

Undertaking work that requires two staff on site

Pandemic Level	Operating principles
2 or Less	BAU
3	One person only in a vehicle, maintain the physical distancing rules (2 metres)
4	<p>Authorisation needs to be obtained from the department data manager or their deputy. A log must be maintained of who was working with who in case contact tracing is needed. In the event two staff are required onsite for safety reasons staff are to drive in separate vehicles to the site.</p> <p>Prior to starting works wash or disinfect hands.</p> <p>Do not touch your workmates vehicle, tools, or equipment and ensure you maintain a distance of at least two meters at all times.</p> <p>In the event a heavy item needs two people to lift onsite ensure that it is disinfected prior to being reloaded into a vehicle.</p>

Hand washing and disinfecting surfaces

2 or Less	BAU
3	Refer to guidelines for level 4.
4	<p>According to NZ's Ministry of Health, hand washing often with soap and water for 20 seconds, then drying your hands for 20 seconds, is a vital practice needed to reduce the spread of covid-19.</p> <p>Carry a minimum of 10L of water, a cake of soap or liquid hand soap for hand washing. You will also need to carry disinfectant spray for the purpose of disinfecting those surfaces you have touched onsite that might lead to virus transmission such as gates and gate chains.</p> <p>Treat yourself and surfaces (gates etc) as though they are infected with C19. It is essential we change our behaviour to ensure we take the above precautions, as essential workers travelling large distances it is vital we safeguard the communities we are travelling to and of course our colleagues and ourselves.</p>

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Work Plan:

Date	Task	Who
07-05-2020	<p>Peter allowed to go to Marton depot and check stocks of bottles for run on 14th. Also check you have courier tickets.</p> <p>Pete to check with Wayne Spencer, but should be able to stock up on PPE (Sanitiser etc if required from the Marton Depot stock).</p> <p>(Advise Brent & Wayne Spencer prior to going in) Fill in the excel contact tracing spreadsheet in the Marton Teams channel</p>	<p>Peter Hurn</p> <p>Pre-Approved (Brent Watson)</p>
Other	<p>Working toward planned runs that Pete can do that do not involve drinking water. If a groundwater site is used for drinking water it must not be sampled under level three.</p> <p>This can be confirmed by Peter ringing the land owner in advance. If we cannot contact the occupier or if we are unsure of whether a groundwater site might be used for drinking water then the site will not be visited.</p> <p>These runs to be complied by Peter Hurn and emailed to Brent and David at least the day before the runs. Peter to confirm that he these sites do not involve drinking water.</p>	<p>Peter Hurn</p> <p>Each run needs approval</p>
14-05-2020	<p>Lower Rangitikei SoE Fill in the excel contact tracing spreadsheet in the Marton Teams channel</p>	<p>Peter Hurn</p> <p>Pre-Approved (Brent Watson)</p>

Horizons: Environmental Data and Science Programme Status Summary

As at 28-April-2020

Programmes Current status:	Core ED Functions																
	Flood / IVR	Consents	Webcams	ED sites	Survey	Flow meters	Manual GW	SoE Surface	SoE Ground	SoE Lakes	Periphyton	Macroinverts	Contract WQ	Swim Spots	Fish	Coastal	ESR Trial
Current Level: 3 Level 3 - Restrict Heightened risk that disease is not contained	Key flood warning sites (IVR sites, River Level, Rainfall, Soil Moisture, Repeaters)	Resource consent sites (Telemetry)	Some webcams are funded by emergency management and may be deemed critical	Other hydro sites (including continuous water quality)	Field based surveying	Flow metering field based activity	Manual GW & lake levels	State of Environment Surface Water	Groundwater Completed for now. Next run in June	Coastal lakes, different rules for helicopter and boat lakes. Review of program	Periphyton	Macro invertebrates	Including WQ and Periphyton work under contract e.g. TDC	Contact Recreation programme suspended early by mid central health	Fish monitoring, programme incomplete	Coastal and Estuary monitoring	Last sample on 23rd of March
Level 0 - No Pandemic										Programme under review							Programme now on hold
Level 1 - Prepare Disease is contained													Inform contract managers of our limitations	Inform and discuss with mid central health			
Level 2 - Reduce Disease is contained, but risks of community transmission growing	Clean and maintain sites in prep for extended period without access to site	Clean and maintain sites in prep for extended period without access to site	Ensure key EM webcams are operational, batteries etc	Clean and maintain sites in prep for extended period without access to site		Check and ensure run guides are up to date	Check and ensure run guides are up to date	Check and ensure run guides are up to date	Check and ensure run guides are up to date	Check and ensure run guides are up to date	Check and ensure run guides are up to date	Check and ensure run guides are up to date	Check and ensure run guides are up to date	Check and ensure run guides are up to date	Check and ensure run guides are up to date	Check and ensure run guides are up to date	Check and ensure run guides are up to date
Level 3 - Restrict Heightened risk that disease is not contained	one person per vehicle	one person per vehicle	one person per vehicle	one person per vehicle	one person per vehicle	one person per vehicle	one person per vehicle	one person per vehicle	one person per vehicle	Boating not permitted under level 3. No Helicopter sampling	one person per vehicle	one person per vehicle	one person per vehicle inform all parties of status	one person per vehicle	one person per vehicle	one person per vehicle	one person per vehicle
Level 4 - Eliminate Likely that disease is not contained	Permission required from EOC	Only when directed by EOC	Only when directed by EOC	Cease activity	Cease activity	Cease activity	Cease activity	Cease activity	Cease activity	Cease activity	Cease activity	Cease activity	Cease activity inform contract partners this can affect consents	Cease activity inform mid central health	Cease activity	Cease activity	Cease activity