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| **Widespread (community) contagion outbreak** | Individual illness  Localised transmission  Widespread transmission  Serious illness  Death | **24**  **(Extreme)** | **Minimise** | High levels of personal hygiene (regular & thorough hand washing/drying)  Regular & thorough surface disinfection  Maintain adequate social distancing/non-congregation  Socially isolate/ stay away from work if unwell  Arrange prompt medical testing if unwell  Isolation of infected individuals/contaminated materials  Use of appropriate medical PPE | **17**  **(High)** | Pathogenic organism awareness (consequences, modes of transmission, effective controls, prevention of spread, reporting & testing)  PPE selection and use training  In-field sanitation training  Biohazardous waste handling & disposal  Ref: [www.health.govt.nz](http://www.health.govt.nz) |
| **Providing medical assistance/ first aid to others** | Exposure to biological pathogens  Infection  Transmission to others  Serious illness / lasting medical condition(s)  Death | **17**  **(High)** | **Minimise** | Maintenance of immunisation & vaccination boosters  Personnel trained and competent to provide first aid response  Adherence to effective safe work procedures  Adherence to principals of first aid provision  Correct use of medical PPE  Prompt referral to medical treatment providers  Adequate biohazardous waste handling/disposal systems  Adequate on-site/in-field sanitation facilities/materials | **13**  **(Medium)** | First aid training  PPE selection and use training  In-field sanitation training  Biohazardous waste handling & disposal |
| **Off road (4WD) vehicle operation** | Environmental damage/ contamination  Vehicle collision, roll-over, swept away  Minor, Moderate or Severe physical injuries  Permanent disability or loss  Fatality | **22**  **(Extreme)** | **Minimise** | Drivers must hold a valid licence for the class of vehicle they are operating. Trainees must hold a valid learner licence for the class of vehicle and be under direct supervision at all times  Vehicles and load to be fully inspected as per standard inspection procedure prior to use. Ensure no damage, unsecured or loose items in the cab or on external trays or decks  Seatbelts must be worn by all occupants at all times  Vehicles must be driven to the conditions – obey all road rules and reduce speeds when travelling on wet, muddy, unsealed roads  Engage 4WD before entering off-road driving areas  Reduce speed to walking pace when crossing overgrown paddocks etc.  Identify and clearly mark any hidden obstacles encountered on route  Pre-walk any sections where vehicle stability or angle of operation is uncertain  Pre-walk any water-course crossings.  Do not attempt to cross any swift-flowing watercourse  greater than 150mm deep & 10 metres wide  Do not attempt to cross any slow moving watercourse greater than 250mm deep & 10 meters wide - and only if an adequately equipped recovery vehicle is present and available to provide assistance | **17**  **(High)** | Driver licencing  Driver competency training  Routine vehicle inspection training  Off-road driver training  [US17976 & US 17978]  Vehicle recovery training  Emergency response training  Emergency communication training  Emergency first aid training |
| **Mechanical kill trap handling & setting** | Hand/finger crush/cut/bruising injuries  Eye injury  Muscular/soft tissue strain injury  By-kill of non-target species and/or undue suffering due to incorrect placement or setting | **10**  **(Medium)** | **Minimise** | Established safe operational procedures in place  Traps only to be handled, set & deactivated by trained, competent, or adequately supervised personnel  Traps placed and set as per recognised best practice for the intended target  Traps to positioned to avoid unintentional by-kill  Eye protection to be worn when hammering staples  Wash and/or sanitise hands prior to eating, drinking, handling shared equipment etc. | **7**  **(Low)** | Trap operation & maintenance training  Trap setting & deactivation training  Target-species specific trap placement training  PPE selection and use training  In-field sanitation training  Biohazardous waste handling training |
| **Handling animal carcases** | Exposure to biological pathogens  Infection  Transmission to others  Serious illness / lasting medical condition(s)  Fatality | **18**  **(High)** | **Minimise** | Maintenance of immunisation & vaccination boosters  Established biohazardous material handling & disposal safe operating procedures  Personnel trained and competent in biohazardous material handling & disposal  Appropriate PPE to prevent contact &/or exposure  Appropriate/secure sample transportation containers  Adequate biohazardous waste handling/disposal systems  Adequate on-site/in-field sanitation facilities/materials | **12**  **(Medium)** | Pathogenic organism awareness (consequences, modes of transmission, effective controls, prevention of spread, reporting & testing)  PPE selection and use training  In-field sanitation training  Biohazardous waste handling & disposal |
| **Hazardous & Controlled Substances storage & handling** | Eye injury (splashes)  Inhalation  Ingestion  Absorption through skin  Allergic reaction  Acute poisoning  Lasting medical health issues  Environmental contamination | **18**  **(High)** | **Minimise** | Established safe operational procedures in place  Personnel trained and competent in hazardous & controlled substance handling & disposal (CSL)  Substances only to be handled by trained, competent, or adequately supervised personnel  Substances stored in original containers with correct and legible labelling  Substances stored in locked, secure, adequately signed, bunded, lit and ventilated area  Relevant MSD sheets available at all times  Incompatible substances segregated in storage and transportation as per DG/UN classification  Appropriate spill kits available in all storage areas and transporting vehicles and on all sites  No smoking, eating or drinking when handling hazardous substances  Appropriate PPE worn at all times to prevent contact  Substances dispensed & mixed in appropriate area with immediate access to emergency wash facilities  Hazardous waste (spill residue/packaging etc) collection and disposal in accord with manufacturers and regulatory authority requirements | **13**  **(Medium)** | Growsafe training  Approved handler training  Controlled Substance Licence  PPE selection and use training  Safety Data Sheets    Stock-level inventory management training  Spill response training  Hazardous waste management training  Emergency response training  Emergency first aid training |
| **Herbicide application** | Eye injury (splashes)  Inhalation  Ingestion  Absorption through skin  Allergic reaction  Short-term medical health issues  Lasting medical health issues  Members of the public/livestock etc. exposed to herbicide  Environmental contamination | **18**  **(High)** | **Minimise** | Established safe operational procedures in place  Personnel trained and competent in herbicide handling & application  Herbicides stored & transported in original, leak-proof containers with correct and legible labelling.  Herbicides only to be applied during appropriate weather conditions  Herbicide applicators correctly calibrated to deliver required coverage/dose  Herbicide stocks used on-site kept to the minimum necessary for task  Appropriate PPE worn at all times to prevent contact  Instal warning signage/barriers as appropriate to prevent members of the public/livestock etc being exposed to harmful substances  No smoking, eating or drinking when handling herbicides  Appropriate spill kits available in all storage areas and transporting vehicles and on all sites  Adequate in-field wash facilities available at all times  Remove and safely stow all exposed PPE and wash hands & face etc before eating, drinking, smoking, driving or engaging with others (co-workers, family members etc). | **13**  **(Medium)** | Safety Data Sheets (SDS)  Growsafe training  Approved handler training  PPE selection and use training  Spill response training  Hazardous waste management training  Emergency response training  Emergency first aid training |
| **Chainsaw use** | Muscular/soft tissue strain injury  Eye injury  Hearing damage  Vibration injury  Exhaust fume inhalation (internal combustion engines)  Kick-back injury  Lacerations  Excessive blood loss  Blood to blood contact/infection  Permanent disability  Fatality | **19**  **(Extreme)** | **Minimise** | Trained, competent, alert personnel  (minimum 2 on site)  Minimum G5 (helmet-mounted) hearing protection & eye protection worn at all times  Regular chainsaw inspection and maintenance  Anti-vibration mounts and front-handle mitt in place  Users to take regular breaks (micro pauses)  Use of correct PPE at all times  Two-handed use and use of mitt at all times  Maintain clear/uncluttered worksite  Maintain awareness of surroundings  Correct body positioning and keeping chain bar tip clear of objects  Chain brake applied when repositioning  Ensure adequate air flow through worksite – avoid work in ‘dead air’ areas | **12**  **(Medium)** | Chainsaw maintenance and operation unit standard training  PPE selection and use training  Emergency response training  Emergency communication training  Emergency first aid training |

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| **Lone work – remote locations** | Disorientation/ becoming lost  Prolonged exposure to extreme weather conditions  Sprain/strain injuries  Fall injuries  Fractures  Insect sting/attack  Anaphylactic reaction  Serious harm  Fatality | **18**  **(High)** | **Minimise** | Trained, competent, fit, and capable personnel  Regular [min. 6-monthly] overdue/lost/injured worker response drills  Thorough planning, preparation & provision – clothing/ equipment/ water/ food/ emergency shelter, comms etc.  Minimum 2x forms of emergency communication (Cell phone/RT/SatComms/Epirb etc.)  Agreed route, work plan and call-in/exit & pick-up plan  Regular and ongoing position/progress reporting communication with dedicated support contact  Regular consultation with weather forecast during planning phase and during deployment  Agreed water-course crossing protocols  Established lone [remote] work and emergency response safe operating procedure(s) in place  Detailed prestart job & emergency response briefing  Use of appropriate clothing, equipment & PPE at all times  Maintain regular and adequate food & fluid intake | **12**  **(Medium)** | Remote/lone field operations training  Bush-craft/navigation/ river crossing & survival training    PPE selection and use training  Scheduled & emergency communication training  Emergency response training  Emergency first aid training  In-field sanitation training  Biohazardous waste handling & disposal |

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| **Firearms (rifles) in the workplace** | Hearing damage/loss  Firearm theft  Serious injury  Fatality | **22**  **(Extreme)** | **Minimise** | Firearms are prohibited on all work sites unless their use is an expressed and documented requirement of the planned work and documented landowner agreement/authorisation is in place  Firearms are only to be handled & used by trained, competent, licenced, and authorised individuals – or authorised trainees under direct and constant supervision  On-site firearm storage to meet all requirements of NZ Arms Act, NZ Arms Code and inspected/approved by the NZ Police. Access to armoury limited to nominated authorised access-holders only.  Firearms to be stored and transported out of public view in a securely locked & inoperable state [i.e. with bolt and all ammunition removed and stored/locked separately from the firearm]  Prestart job briefing to include details of the designated firearms handler, the agreed work plan, intended target, and emergency response.  Hearing protection required for firearms >.22-calibre  Firearms must only be loaded [armed] once in the designated active-use area. Bolts to be set to the disengaged position with the safety catch in place until ready to take the shot. Safety catches to be reset and bolts disengaged immediately following shot(s)  Firearms to be made inoperable [bolt/ammunition removed] before exiting designated work area | **17**  **(High)** | Firearms safety training  Firearms licencing  Unit Standard 9131  Unit Standard 20931  Emergency response training  Emergency communication training  Emergency first aid training |
| **Useful reference links**  [www.worksafe.govt.nz/managing-health-and-safety/**getting-started/**introduction-hswa-special-guide/](http://www.worksafe.govt.nz/managing-health-and-safety/getting-started/introduction-hswa-special-guide/)  [www.worksafe.govt.nz/managing-health-and-safety/businesses/**general-requirements-for-workplaces**/general-risk-and-workplace-management-part-2/](http://www.worksafe.govt.nz/managing-health-and-safety/businesses/general-requirements-for-workplaces/general-risk-and-workplace-management-part-2/)  [www.worksafe.govt.nz/managing-health-and-safety/getting-started/understanding-the-law/**primary-duty-of-care**/what-is-the-primary-duty-of-care/](http://www.worksafe.govt.nz/managing-health-and-safety/getting-started/understanding-the-law/primary-duty-of-care/what-is-the-primary-duty-of-care/)  [www.worksafe.govt.nz/dmsdocument/25889-**first-aid-at-work**/latest](http://www.worksafe.govt.nz/dmsdocument/25889-first-aid-at-work/latest)  [www.nzta.govt.nz/vehicles/vehicle-types/**quad-bikes-and-atvs**/](http://www.nzta.govt.nz/vehicles/vehicle-types/quad-bikes-and-atvs/)  [www.worksafe.govt.nz/topic-and-industry/**hazardous-substances/**](http://www.worksafe.govt.nz/topic-and-industry/hazardous-substances/)  [www.worksafe.govt.nz/topic-and-industry/machinery/saws-and-shears/**chainsaws**/](http://www.worksafe.govt.nz/topic-and-industry/machinery/saws-and-shears/chainsaws/)  [www.police.govt.nz/advice-services/**firearms-and-safety**/firearms-safety](http://www.police.govt.nz/advice-services/firearms-and-safety/firearms-safety) | | | | | | |

**DISCLAIMER:**

The information provided in this document is intended as a general guide or template. Modification or the incorporation of additional material may be required to accurately reflect the recipients' operational systems and methods. Predator Free New Zealand Trust takes no liability for workplace health and safety as a result of utilising or adopting this material.

**End.**