

Activity / Task / Location: ExperimentFest – collection of water	Reviewed / Approved By: Margaret Platell
samples on campus and analysis in the laboratory	Signature and Date: 26/4/2023
Risk Assessment Developed by: A/Prof Troy Gaston	Date: 24-04-23

# **Risk Matrix**

## Likelihood

	N.B. For more details regarding use of this matrix / definitions refer to final page of this document	Rare	Unlikely	Possible	Likely	Almost Certain
Ce	Severe Eg. Potential Fatality or Injury or Illness with permanent disability	MEDIUM	MEDIUM	HIGH	EXTREME	EXTREME
duen	Major Eg. Potential Lost Time Injury (but non-permanent disability)	LOW	MEDIUM	MEDIUM	HIGH	EXTREME
) U S G	Moderate Eg. Potential Medical Treatment injury or illness (but no lost time)	LOW	LOW	MEDIUM	MEDIUM	HIGH
ပိ	Minor Eg. Potential First Aid injury	LOW	LOW	LOW	MEDIUM	MEDIUM
	Minimal Eg. Hazard or near miss requiring reporting and follow up action	LOW	LOW	LOW	LOW	LOW

#### Actions required based on Risk Assessment

Extreme	An "extreme" risk requires immediate assessment and senior staff consideration is required; a detailed mitigation plan must be developed, and consideration should be given to ceasing the activity unless the risk can be reduced to a level of high or less; regular monitoring and reported on to the relevant management/steering committee; Target resolution should be within 1 month.
High	A "high" risk may also require immediate assessment and senior staff consideration; a mitigation plan must be developed; regular monitoring and reported on to the relevant management/steering committee. Target resolution (ideally reduction to medium or low level of risk) should be within 3 months.
Medium	A mitigation plan must be developed; existing controls need to be reviewed. Target resolution (ideally reduction to low level of risk) should be within 1 year.
Low	Risk is tolerable; manage by well established, routine processes/procedures and be mindful of changes to nature of risks.



Hazard Identification and initial Risk Rating			Control measures and Residual Risk Rating		Remaining Hazards	Actions required
What are the steps of the activity / items of equipment?	What are the potential hazards?	Risk Rating based on Risk Matrix	What control methods or measures will be used to reduce the likelihood and/or the consequence of an illness or injury from those hazards?	Residual Risk Rating based on Risk Matrix	What hazard remains?	What additional actions are required (by who and in what timeframe) to raise the level of control?
General Covid-19 info	ormation					
Higher risk student or staff member attending teaching session	Potential transmission of COVID-19 infection during session to vulnerable and immunocompromi sed students and staff.	Possible Severe <sup>#</sup> = HIGH	- Supplementary COVID 19 induction at commencement of session will ask Staff (Educators and Technical staff) and Students who identify as falling under the known higher risk groups (over 65, immuno-suppressed or with an underlying medical condition including Cardiovascular Disease, Chronic Respiratory Disease, Diabetes, Cancer, Hypertension) to notify technical officer and will be <b>strongly advised not to attend</b> face to face teaching activities at this time as it is recommended they continue to self-isolate and therefore do not participate in these practical sessions to reduce their risk of exposure. It has also been identified that Indigenous Australians may have an increased risk to COVID-19 and this advice also extends to this group until the data is available to make a more informed assessment. -Staff https://www.newcastle.edu.au/ data/assets/pdf_file/00 20/620813/COVID19-Questionnaire-staff.pdf and students https://www.newcastle.edu.au/ data/assets/pdf_file/00 19/620812/COVID19-Questionnaire-student.pdf will be directed to complete a COVID19 Health screening questionnaire submitted to the UON Health Service who will follow up with any persons who identify as higher risk to recommend reasonable adjustments during the COVID-19 Pandemic Period including deferring attendance at face to face sessions (students). - Students identifying as a higher risk individual will be provided with a concession.	Unlikely x Severe <sup>#</sup> = MEDIUM	Higher risk student does not wish to take concession and wants to attend session Higher risk staff member or Educator does not want to cease working in sessions. Higher risk person does not identify their risk status	If higher risk persons request for attendance is approved by the relevant Course Coordinator or staff Supervisor, additional PPE will be mandatory (P2/N95 respirator) unless the nominated PPE (face mask) already in use is assessed as being sufficient to manage the risk Note- if this PPE is not available and/or is not fit tested the student/staff member will not be approved access to the session



Students / staff travelling to/from sessions	Risk of infection during transit is increased if car- pooling or using public transport as these are enclosed spaces with the potential for close contact between people. (may have less than the identified 4m <sup>2</sup> per person and may be closer than 1.5m to others)	Possible Severe <sup>#</sup> = HIGH	<ul> <li>If using public transport keep a safe physical distance apart from other travellers and transit staff of at least 1.5 metres apart.</li> <li>Observe personal hygiene measures including hand washing/sanitising after touching shared surfaces etc.</li> <li>Consider travel outside of peak times.</li> <li>Observe any risk controls put in place by transport provider.</li> <li>Ref: SafeWork Australia factsheet- Public Transport: Minimising the risk of exposure to COVID-19 https://www.safeworkaustralia.gov.au/doc/public-transport-minimising-risk-exposure-covid-19</li> <li>Vehicle air-conditioning should be set to fresh air</li> <li>Recommended 2 persons per vehicle for carpooling as this allows 1.5 m distancing.</li> </ul>	Unlikely x Severe <sup>#</sup> = Medium	
attendance at campus or in the field	A stan member attending who has COVID-19 (confirmed or unconfirmed). This increases the risk of transmission of SARS-CoV-2 to other Staff and/or Educators and/or students present	Possible Severe <sup>#</sup> = HIGH	<ul> <li>Supplementary COVID 19 induction at commencement of session will advise staff and students they must not come to the campus or field trip if they have any symptoms, current imposed isolation restrictions (including being diagnosed with COVID-19 or having had close* contact with someone diagnosed with COVID-19).</li> <li>NOTE: Please make contact with your Course Coordinator to identify this reason for not attending the session as soon as possible and the discussion will be treated confidentially.</li> <li>Should any staff or student be confirmed as having COVID-19 they are requested to immediately notify the University Health response Team (health.response@newcastle.edu.au) so UON can quickly take any necessary precautionary steps, including notifying others who may have been in contact with the person whilst they could have been infectious to immediately self-isolate. NOTE: provisions will be made to assist students with exemptions etc. so they are not adversely impacted should they be required to self-isolate.</li> <li>If a staff member or student is identified as displaying any of the symptoms whilst in the workplace they will politely be asked to leave and go home and self-isolate as a precaution until the symptoms have gone and if they are unwell to seek medical advice.</li> </ul>	Unlikely x Severe <sup>#</sup> = Medium	



Waiting outside room	Transmission of		- The 1.5m personal distancing requirement will be		- Students that don't	- Will receive any initial
or teaching space	SARS-CoV-2		enforced both in and outside the room using floor		comply with	warning but if they
	whilst waiting		stickers where appropriate for work at bench. Educators		instructions	continue to disregard this
	outside the room		and staff will monitor the areas reminding students about			control measure they will
			the importance of following the new social distance			be asked to leave and
	Additional contact		guidelines.			return home.
	with high risk Oral					
	Clinic students		- Signs and posters have been located around the areas			
			to remind staff and students of the risks of COVID-19			
			and the control measures that are to be observed.			
			At Ourimbab interaction with adjacent oral clinic			
			students will be minimised by students access into the			
			building through the northern entry off courtyard only			
			the opposite entry to building to oral health clinic			
			students and staff) Entry through the single door in SI 1-			
			121 will be monitored by technical staff. Entry into SI 1-			
			105 will be through segregated entry and exit doors			
			- All staff and students instructed and expected to			
			observe cough/sneeze etiquette into the inner elbow,			
		Possible				
		Y USSIDIE	- All staff and students instructed and expected to if they	Unlikely x		
		Severe#	blow their nose put the tissue straight into the bin and	Severe <sup>#</sup> =		
		= HIGH	wash their hands.	MEDIUM		
			All staff and students instructed and expected to			
			- All stall and students instructed and expected to			
			the face, coughing/speezing protocols, no pens in the			
			mouth no chewing nails etc.)			
			mouth, no onewing hans etc.)			
			- Hand washing/hand sanitiser after touching shared			
			surfaces (door knobs etc.) or if you touch your face (this			
			includes smoking and eating as well as scratching your			
			nose, rubbing your mouth etc.)			
			- Regular cleaning of any identified shared surfaces			
			(door knobs, taps etc.) with suitable decontaminate by			
			cleaning contractors.			
			There is an allowance of $2m^2$ per person within reserve			
			which onsures a minimum volume of air per person			
			within the englosed space that will allow reduction of the			
			concentration of potential virus aerosol particles por			
			square metre within the room (released by a space or			
			could etc. from an infected person) to a concentration			
			less likely to lead to infection			
	l		ICOD INCLY IN ICAU IN INICUINI			l



			<ul> <li>Signage on room door identifying maximum capacity for the room (recommended max cap) and including provisions for social distancing (1.5m)</li> <li>If someone has a coughing or sneezing fit whilst in the room or corridor they must cover their face with the crook of their arm and leave the building immediately</li> </ul>			
Attending teaching and learning session including use of amenities	Transmission of COVID-19 in the room where a student, educator or staff member attends whilst asymptomatic and unknowingly infected Use of common amenities before, during or after session	Possible x severe <sup>#</sup> = HIGH	<ul> <li>Supplementary COVID 19 induction at commencement of session will advise staff and students to observe basic personal infection controls (no touching the face, coughing/sneezing etiquette into inner elbow, no pens in the mouth, no chewing nails, no finger-lick paper-flick etc.)</li> <li>All staff and students instructed and expected to, if they blow their nose, put the tissue straight into the bin and wash their hands.</li> <li>At Ourimbah, all staff and students instructed and expected to utilise the amenities in the adjacent Classroom South as toilets in the Science Building will be utilised solely for Oral Clinic students and staff to change attire when arriving from higher risk clinical placements or work locations.</li> <li>All staff and students instructed and expected to observe hand hygiene practices with regular handwashing (or hand sanitising with gel if a hand basin is not available) including upon entry and prior to exiting and if anyone contaminates (potentially) their hands by touching their face or sneezing fit whilst in the room they must cover their face with the crook of their arm and leave the room immediately</li> <li>Vacating the room and shutting it up for a minimum of 40 minutes if someone has a coughing it of a crooked elbow, evacuation of the room may not be required (assess at the time on individual basis) as unlikely for</li> </ul>	Unlikely x Severe <sup>#</sup> = MEDIUM	Exposure risk from cleaning products	- refer to SDS for cleaning product and prepare, use and store according to manufacturer instructions, including wearing PPE when required





			any aerosols to be released very far into the room and if they are it would be limited to within close proximity to the person (immediate 4m <sup>2</sup> ). The person would leave the room if coughing and the work station left vacant with the surfaces wiped down after 40 minutes and/or at the end of the session as a precaution.			
			<ul> <li>Regular cleaning of shared surfaces (door knobs, taps etc.) with a suitable decontaminate by cleaning contractors</li> </ul>			
			- The teaching working surfaces and any equipment (computer, keyboard, microscope) will be cleaned with 70% alcohol wipes or use spray bottles of a suitable disinfection agent (at the appropriate working dilution) and paper towel after each use by the staff member.			
			- Use of appropriate impermeable barriers where alcohol wipes are not suitable or can't be used			
			- The 1.5m personal distancing requirement will be enforced both in the lab and outside it.			
			- Reduction of student numbers per session to meet the required room capacity limit and also with consideration to the 1.5 m personal distancing requirements and activity work flows.			
			-Signage on room door identifying maximum capacity for the room (recommended max cap)			
			- Any teaching notes provided to be laminated or in a plastic sleeve so they can be wiped over after use			
			- Staff will lay out any materials at each work area prior to the session and remove equipment after the session to minimise movement to common and shared areas during the session			
Contamination of equipment or tools	Contamination of equipment or surfaces with COVID-19 from a student, educator or staff member who is	Possible x moderat e = MEDIUM	- Staff will be responsible for additional cleaning of equipment with disinfectants, noting that these must be used according to the manufacturer's recommendations and concentration of the active ingredient, prior and between sessions.	Unlikely x Moderate = LOW	- Shortage of Hand sanitiser and disinfectants due to higher demand Exposure risk from cleaning products	Contact IFS for assistance     Refer to SDS for cleaning product and prepare, use and store according to



	asymptomatic and unknowingly infected,		<ul> <li>After the completion of each session, all waste will be disposed of according to the normal procedures for that waste.</li> <li>Regular decontamination of surfaces shared or touched by others is recommended during the standard cleaning process of the facilities, including door knobs, taps, touch screens for multi-users.</li> <li>Where possible doors left open so door knobs do not</li> </ul>			manufacturer instructions, including wearing PPE when required
Attending teaching and learning sessions during pandemic	Mental Health Injury- The mental health of Staff and Students is an important consideration at this time as many feel fearful and alarmed which is normal and to be expected given the current environment and they may be concerned about attending the campus at this time.	Possible x moderat e = MEDIUM	<ul> <li>Staff and students are encouraged to discuss any concerns with their Course Co-ordinator or Supervisor and to review this risk assessment and if additional control measures or a change to work activity is identified as necessary, these need to be incorporated into the risk assessment.</li> <li>If a Student still identifies they are not comfortable to attend there are provisions in place to allow exemption from attending the class or option for online study wherever possible.</li> <li>Staff will need to determine with their Supervisor what actions can be taken to address their concerns, noting the work activities in question associated with the teaching that cannot be undertaken from home or online</li> </ul>	Unlikely x moderate = LOW		
General laboratory ad	ctivities					-
Entry & Exit / Normal doors with A4 size glass window at eye level	Cuts if glass is broken	Low	Care while opening and closing doors	Low	Cuts if glass is broken	N/A
Floors / Slippery when wet	Falling and associated physical injury	Low	Maintain dry floors/ Immediately wipe up spills / Wet floor sign / Students instructed to take care when walking around the lab.	Low	Slight risk of slipping	N/A
Floors / Loose items, which are tripping hazards	Tripping and associated physical injury	Low	Lab floor not used for general storage / All necessary items placed away from traffic areas / Student bags etc. stored under lab bench / Students instructed to take care when walking around the lab	Low	Slight risk of tripping	N/A
Floors / Lab stools, which are tripping hazards	Tripping and associated physical injury	Low	Lab stools to be stored under lab bench when not in use / Students instructed to take care when walking around the lab	Low	Slight risk of tripping	N/A



Lab stools / Proper	Falling off stool	Low	Students to properly use lab stools by having all four	Low	Falling/tipping over	N/A
use	and associated		stool legs on the ground at all times.		stool	
	physical injury					
Hard laboratory	Physical injury if	Low	Students instructed to take care when walking around	Low	Falling against	N/A
bench tops.	falling against		the lab / No running or pushing other students		bench top	
-	bench top				· · · · · · · · · · · · · · · · · · ·	
Gas Lines /	Illness from	Low	Students instructed to keep hands off outlets unless	Low	None if gas isolation	N/A
Accidental opening	exposure to gas.		using gas source / Report any suspected gas leaks /		valve is turned off	
· · · · · · · · · · · · · · · · · · ·	burns if das		Gas isolation valve off unless in use			
	ignites					
Sharps bin	Cuts from	Low	Use Australian Standard Sharps bin / Students	Low	Slight risk of cuts	N/A
	materials in bin	2011	instructed in the proper use of the Sharps bin	2011		
Use of 70% ETOH	Exposure to	Low	Bottle properly labelled / Students instructed in the	Low	Possible skin	Ν/Δ
spray cleaning bottle	ethanol liquid and	LOW	property see for lab bench top cleaning / MSDS summary	LOW	contact with ethanol	17/7
spray cleaning bottle			shoet given to studente			
	irritation/possible		sheet given to students			
	initiation/possible					
Class front storage		Low	Shotterproof glass / Not in main traffic grass	Low	Slight rick of outo	NI/A
Glass-Ironi storage	Cuts II glass	LOW	Shallerproof glass / Not in main traffic areas.	LOW	Slight fisk of cuts	N/A
	Dieaks	Law	Duilding has availed datastage / Lab has fine	Law	lucium curde e re	N1/A
Fire	Burns/smoke	LOW	Building has smoke delectors / Lab has life	LOW	injury when	N/A
	Innalation/Injury		extinguisners / Appropriately marked fire exits/ Fire		evacuating room	
	when evacuating		blanket / Safety snower / Fire warden present in			
	room		building worn			
Laboratory testing of	water samples					
Environment/ Skin	Soil or water-	Low	PPE worn (gloves/lab coats/safety glasses). Students	Low	Slight risk of contact	N/A
contact with soil or	borne disease		instructed to minimise contact and wash hands as soon		with soil or water	
water			as practicably possible after practical.			
Exposure to	Skin and/or eye	Medium	Students instructed in the proper use / SDS summary	Low	Possible spill risk	N/A
potentially hazardous	irritation, nausea if		in Lab / PPE worn (gloves/lab coats/safety glasses)			
chemical reagents	ingested					
used in "powder	J. J					
pillows" for water test						
kits						
Field-based sampling	on Campus		a		•	1
		-				
Environment/ hot,	Sunburn, heat	Low	Students instructed to wear appropriate clothing- hat &	Low	Slight risk of	N/A
cold or wet	exhaustion,		sunglasses in hot weather, wet weather gear when		sunburn remaining	
	hypothermia.		raining, bring bottled drinking water, use the sunscreen			
			provided			
Environment/	Falling and	Low	Students warned of any areas to avoid because of	Low	Slight risk of	N/A
Tripping and slipping	associated		known hazards. Students instructed to take care when		tripping/slipping	
hazards	physical injury		walking around in the field, wear closed, non-slip shoes			
			(e.g. joggers or boots) at all times and report all iniuries			
			to the demonstrator.			



Environment/ Sharp objects, thorns, etc.	Scratches and cuts	Low	Students instructed to wear long sleeved shirts and trousers and closed shoes. Students warned of any areas to avoid because of known hazards. First aid kit available.	Low	Slight risk of minor injury	N/A
Equipment/ Tripping hazard	Tripping and associated physical injury	Low	Students instructed not to leave equipment in thoroughfares or paths	Low	Slight risk of tripping	N/A
Behaviour/ personal injury or injury to others	Physical injury	Low	Students are instructed not to "clown around" and put their own or their classmates safety at risk at any time. Students instructed to follow the code of conduct issued by the School of Environmental & Life Sciences.	Low	Slight risk of physical injury	N/A
Environment/ Skin contact with soil or water	Soil or water- borne disease	Low	Students instructed to minimise contact and wash hands as soon as practicably possible after practical.	Low	Slight risk of contact with soil or water	N/A
Environment/ falling into waterway/waders filling with water	Drowning, hypothermia	Medium	Students instructed to use extreme caution near pond and not to collect samples alone.	Low	Slight risk of falling in water remains	N/A
Environment/ Insect bites/stings	Skin irritation, anaphylactic shock, insect- borne disease	Medium	Students instructed to wear long sleeved shirts and trousers and use insect repellent. Those with known allergy (e.g. plants, insects) to carry appropriate medication and advise lecturer. First aid kit available.	Medium (for those allergic to bites/stings )	Slight risk of insect bite	N/A
Environment/ Snake or spider bite	Skin irritation, death	Medium	Students instructed to wear long sleeved shirts and trousers and closed shoes. Students instructed not to handle venomous and/or poisonous animals. Students instructed to report all bites to the demonstrator. First aid kit available.	Medium (for those allergic to bites/stings )	Slight risk of such bites remain	N/A

Summary of Requirements bas	Review Period / Date	
Personal Protective Equipment	Safety Glasses, laboratory coat, protective footwear, disposable gloves (as required), waders, insect repellent.	Yearly
Other Equipment and Equipment Protection	Assorted glassware, chemicals (solids and solutions); microscope; spectrophotometer; water quality metres, sampling nets.	Yearly
Training Requirements	General safety induction on correct laboratory procedure is provided for both the environmental science and chemistry laboratories at the start of the semester. Potential hazards in individual laboratory exercises are identified at the start of each session. Students are not permitted to work in the lab without proper induction and sign off of relevant safety documents.	Yearly



Procedures, SOPs etc		
Relevant Legislation etc.	WHS Act 2011 (NSW), AS/NZS 2243.1.2005 Safety in laboratories, Part 1: Planning & Operational Aspects AS/NZS 2243.2.2005 Safety in laboratories, Part 2: Chemical Aspects	Yearly

#### Questions to ask in order to determine the hazards relating to the task:

Α	Could people be injured or made sick by things such as:	D	What could go wrong?
٠	Noise	٠	What if equipment is misused?
٠	Light	٠	What might people do that they shouldn't
٠	Radiation	٠	How could someone be killed?
٠	Toxicity	•	How could people be injured?
٠	Infection	٠	What may make people ill?
٠	High or low temperatures	٠	Are there any special emergency procedures required?
٠	Electricity		
٠	Moving or falling things (or people)		
٠	Flammable or explosive materials	Ε	Are procedures or organisational systems missing or not being
٠	Things under tension or pressure (compressed gas or liquid; springs)		followed?
٠	Any other energy sources or stresses	٠	Standard Operating Procedures?
٠	Biohazardous material	٠	Risk Assessments?
٠	Laser	٠	Induction or training?
		٠	Management of change?
		٠	Safety Inspections?
		٠	Hazard reporting?
		•	Contractor Management?
В	Can workplace practices cause injury or sickness?	F	What kinds of injuries could possibly occur?
٠	Are there heavy or awkward lifting jobs?	٠	Broken bones
٠	Can people work in a comfortable posture?	٠	Eye damage
٠	If the work is repetitive, can people take breaks?	٠	Hearing problems
٠	Are people properly trained?	٠	Strains or sprains
٠	Do people follow correct work practices?	٠	Cuts or abrasions
٠	Are there adequate facilities for the work being performed?	٠	Bruises
٠	Are universal safety precautions for biohazards followed?	٠	Burns
٠	Is there poor housekeeping? Look out for clutter	٠	Lung problems including inhalation injury/ infection
٠	Torn or slippery flooring	٠	Skin contact
٠	Sharp objects sticking out	٠	Poisoning
٠	Obstacles	٠	Needle-stick injury
С	Imagine that a child was to enter your work area?	٠	Psychological illness or injury
٠	What would you warn them to be extra careful of?		



• What would do to reduce the harm to them?

How to Assess Risk

Step 1 – Consider the Consequences         What are the potential consequences of an incident occurring?         Consider what could reasonably happen as well as what may actually happen.         Look at the descriptions and choose the most suitable Consequence.		Step 2 – Consider the Likelihood         What is the likelihood of the consequence identified in step 1 happening?         Consider this with the current controls in place.         Look at the descriptions and choose the most suitable Likelihood.		Step 3 – Calculate the Risk Rating         A. Take Step 1 rating and select the correct column.         B. Take Step 2 Rating and select the correct line.         C. The calculated risk rating is where the two ratings cross						
Consequence		Likelihood				LIKELIHOOD Rare Unlikely Possibly Likely Con				
Serious	Potential Fatality or Injury or Illness with permanent disability	Almost Certain	The event could be expected to occur in most circumstances: "This is a common problem here".		Serious	MEDIUM	MEDIUM	нісн	EXTREME	EXTREME
Major	Potential Lost Time Injury requiring time off work (but non-permanent disability)	Likely	The event has a reasonable chance of occurring in usual conditions: "It has happened here before".	ENCE	Major	LOW	MEDIUM	MEDIUM	HIGH	EXTREME
Moderate	Potential medical treatment Injury or Illness but no lost time	Possible	The event might occur occasionally, has occurred sometime: "Has infrequently happened here before".	EQUI	Moderate	LOW	LOW	MEDIUM	MEDIUM	HIGH
Minor	Potential First Aid Injury	Unlikely	The event has a small chance of occurring. "It has not happened here but has occurred elsewhere".	CONS	Minor	LOW	LOW	LOW	MEDIUM	MEDIUM
Minimal	No injury but hazard exists or near miss occurred requiring reporting and follow up action	Rare	Very unlikely to occur. "It would be extremely rare for it to occur here".		Minimal	LOW	LOW	LOW	LOW	LOW

Control Type Eliminate	<b>Example</b> Removing the hazard, eg taking a hazardous piece of equipment out of service.
Substitute	Replacing a hazardous substance or process with a less hazardous one, eg substituting a hazardous substance with a non-hazardous substance.
Engineering	Redesign a process or piece of equipment to make it less hazardous, Isolating the hazard from the person at risk, eg using a guard or barrier, or containing the hazard in an enclosure.
Administrative	Adopting safe work practices or providing appropriate training, instruction or information.





**Controlling the Risk:** Risk control is a method of managing the risk with the primary emphasis on controlling the hazards at source. For a risk that is assessed as "extreme" or "high", steps should be taken immediately to minimize risk of injury. The method of ensuring that risks are controlled effectively is by using the "hierarchy of controls". The Hierarchy of Controls are: