

HS Risk management form

For additional information refer to HS329 [Risk Management Procedure](#)

Faculty/Division: EET		School/Unit: ANFF		
Document number	Initial Issue date June 2020	Current version v1.01	Current Version Issue date 19 June 2020	Next review date

Risk management name **COVID-19 Measures for ANFF-NSW One-on-One Training**

Form completed by	Matt BORELAND	<i>Signature</i>	<i>Date 19/6/2020</i>
Responsible supervisor/ authorising officer	Matt BORELAND	<i>Signature</i>	<i>Date 19/6/2020</i>

Identify the activity and the location of the activity

Description of activity One of the key services provided by ANFF-NSW is the provision of advanced nanofabrication training for research students and staff. Training programs are customised to suit each researcher's individual project requirements and are most often delivered in one-on-one sessions with ANFF-NSW process engineers.

Description of location ANFF-NSW Labs... Newton Building and Old Main Building

Identify who may be at risk from the activity:

This may include fellow workers, visitors, contractors and the public. The types of people may affect the risk controls needed and the location may affect the number of people at risk

Persons at risk ANFF-NSW staff and lab users

How they were consulted on the risk Risk assessment will be provided and discussed before activity commences. ANFF-NSW staff consulted as part of development of the addition measures for one-to-one training

List legislation, standards, codes of practice, manufacturer's guidance etc used to determine control measures necessary

Work Health and Safety Act 2011
 Work Health and Safety Regulation 2017
 NSW Health guidelines on PPE for COVID-19 for health workers <https://www.health.nsw.gov.au/Infectious/covid-19/Pages/ppe.aspx> & <http://cec.health.nsw.gov.au/keep-patients-safe/COVID-19/Personal-Protective-Equipment-PPE>

UNSW HS Management System (Policies, Procedures and Guidelines)

ANFF-NSW Health and Safety Guidelines

Identify hazards and control the risks.

1. An activity may be divided into tasks. For each task identify the hazards and associated risks. Also list the possible scenarios which could sooner or later cause harm.
2. Determine controls necessary based on legislation, codes of practice, Australian standards, manufacturer's instructions, safety data sheets etc.
3. List existing risk controls and any additional controls that need to be implemented
4. Rate the risk once all controls are in place using the risk rating matrix (below and in HS329 Risk Management Procedure)

SHADED GREY AREAS

If you need to determine whether it's reasonably practicable to implement a control based on the risk, complete the shaded grey columns

Feel free to resize the boxes to suit your situation/the amount of text you need to use

Task/ Scenario	Hazard	Associat ed harm	Existing controls	Any additional controls required?	Risk Rating			Cost of controls (in terms of time, effort, money)	Is this reasonably practicable Y/N
					Consequences	Likelihood	Risk		
COVID person-to-person transmission @>1.5M separation via breath, coughing, sneezing or bare hand touching of contaminate surfaces	COVID-19	COVID infection	<ul style="list-style-type: none"> • Elimination: Trainings will be suspended if local COVID-19 outbreaks in the UNSW or nearby community • Substitution: N.A. process tools require hands-on-training • Engineering controls: HEPA filtered, positive pressure cleanroom at ISO5 -ISO7 <ul style="list-style-type: none"> ○ Positive pressure minimises ingress of external dust, aerosolised material, etc that could carry virus into the cleanroom ○ 100-10,000 cleaner than external environment, ○ equal or better to many surgical theatres • Administrative controls: <ul style="list-style-type: none"> ○ All lab users complete ANFF-NSW Lab Safety Induction, including cleanroom hygiene practices. ○ Training conducted by experiences ANFF-NSW staff ○ Room occupancy capped to enable >4sqm/person and >1.5m separation from surrounding lab users (social distancing) ○ Real-time monitoring of room occupancy to maintain distancing capability ○ Entry/change room occupancy limited to one to minimise unprotected contact ○ UNSW Safe Return to Campus training for general COVID awareness ○ Cleaning stations at lab entry: hand washing on entry/exit ○ Cleaning roster for cleanroom includes daily clean of touchpoints in entry/gowning areas ○ PPE order to minimise hand/touch-transmission (gloves first to minimise touch transmission to surfaces) ○ No shared cleanroom garments (disposable Tyvek garments issued) ○ Posters displayed to reinforce social distancing and hygiene measures • PPE <ul style="list-style-type: none"> ○ Gloves, booties, hair covering, mask, googles in "grey" areas ○ Addition of full cleanroom "bunny" suit in "white" areas 		5	E	M	No additional cost	Y

<p>COVID person-to-person transmission @<1.5M separation via breath, coughing, sneezing or touching of contaminate surfaces</p>		<ul style="list-style-type: none"> • Elimination: Trainings will be suspended if local COVID-19 outbreaks in the UNSW or nearby community • Substitution: N.A. process tools require hands-on-training • Engineering controls: HEPA filtered, positive pressure cleanroom at ISO5 -ISO7 <ul style="list-style-type: none"> ○ Positive pressure minimises ingress of external dust, aerosolised material, etc that could carry virus into the cleanroom ○ 100-10,000 cleaner than external environment, ○ equal or better to many surgical theatres • Administrative controls: <ul style="list-style-type: none"> ○ All lab users complete ANFF-NSW Lab Safety Induction, including cleanroom hygiene practices. ○ Training conducted by experienced ANFF-NSW staff ○ Room occupancy capped to enable >4sqm/person and >1.5m separation from surrounding lab users (social distancing) ○ Real-time monitoring of room occupancy to maintain distancing capability ○ Entry/change room occupancy limited to one to minimise unprotected contact ○ UNSW Safe Return to Campus training for general COVID awareness ○ Cleaning stations at lab entry: hand washing on entry/exit ○ Cleaning roster for cleanroom includes daily clean of touchpoints in entry/gowning areas ○ PPE order to minimise hand/touch-transmission (gloves first to minimise touch transmission to surfaces) ○ Reusable face shield cleaned with IPA after use ○ No shared cleanroom garments (disposable Tyvek garments issued) ○ Posters displayed to reinforce social distancing and hygiene measures • PPE <ul style="list-style-type: none"> ○ Gloves, booties, hair covering, mask, goggles in “grey” areas ○ Addition of full cleanroom “bunny” suit in “white” areas ○ Upgraded PPE for training requiring <1.5m separation: <ul style="list-style-type: none"> a) full face shield on trainer to block breath/sneezing/coughing between trainer and trainee b) upgraded P2/95 mask on both trainer and trainee to provide high capture of aerosolized breath/sneezing/coughing <p>These levels of PPE are in line with recommendations for NSW health workers in COVID zones (https://www.health.nsw.gov.au/Infectious/covid-19/Pages/ppe.aspx & http://cec.health.nsw.gov.au/keep-patients-safe/COVID-19/Personal-Protective-Equipment-PPE).</p> 	5	E	M	<p>~\$2-5 for disposable P2/95 masks</p> <p>~\$15 for reusable face shield</p>	Y
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Risk Rating Matrix

RISK RATING METHODOLOGY AND MATRIX																																															
Consider the Consequences Consider: What type of harm could occur (minor, serious, death)? Is there anything that will influence the severity (e.g. proximity to hazard, person involved in task etc.). How many people are exposed to the hazard? Could one failure lead to other failures? Could a small event escalate?	Consider the Likelihood Consider: How often is the task done? Has an accident happened before (here or at another workplace)? How long are people exposed? How effective are the control measures? Does the environment effect it (e.g. lighting/temperature/pace)? What are people's behaviours (e.g. stress, panic, deadlines) What people are exposed (e.g. disabled, young workers etc.)?	Calculate the Risk 1. Take the consequences rating and select the correct column 2. Take the likelihood rating and select the correct row 3. Select the risk rating where the two ratings cross on the matrix below. VH = Very high, H = High, M = Medium, L = Low																																													
5. Severe: death or permanent disability to one or more persons 4. Major: hospital admission required 3. Moderate: medical treatment required 2. Minor: first aid required 1. Insignificant: injuries not requiring first aid	A. Almost certain: expected to occur in most circumstances B. Likely: will probably occur in most circumstances C. Possible: might occur occasionally D. Unlikely: could happen at some time E. Rare: may happen only in exceptional circumstances	<table border="1"> <thead> <tr> <th colspan="2"></th> <th colspan="5" style="background-color: #800080; color: white;">CONSEQUENCES</th> </tr> <tr> <th colspan="2"></th> <th style="background-color: #90EE90;">1</th> <th style="background-color: #FFFF00;">2</th> <th style="background-color: #FFFF00;">3</th> <th style="background-color: #FF0000;">4</th> <th style="background-color: #FF0000;">5</th> </tr> </thead> <tbody> <tr> <th rowspan="5" style="background-color: #0000FF; color: white; writing-mode: vertical-rl; transform: rotate(180deg);">LIKELIHOOD</th> <th style="background-color: #0000FF; color: white;">A</th> <td style="background-color: #90EE90;">M</td> <td style="background-color: #FFFF00;">H</td> <td style="background-color: #FFFF00;">H</td> <td style="background-color: #FF0000;">VH</td> <td style="background-color: #FF0000;">VH</td> </tr> <tr> <th style="background-color: #0000FF; color: white;">B</th> <td style="background-color: #90EE90;">M</td> <td style="background-color: #90EE90;">M</td> <td style="background-color: #FFFF00;">H</td> <td style="background-color: #FF0000;">H</td> <td style="background-color: #FF0000;">VH</td> </tr> <tr> <th style="background-color: #0000FF; color: white;">C</th> <td style="background-color: #ADD8E6;">L</td> <td style="background-color: #90EE90;">M</td> <td style="background-color: #FFFF00;">H</td> <td style="background-color: #FF0000;">H</td> <td style="background-color: #FF0000;">VH</td> </tr> <tr> <th style="background-color: #0000FF; color: white;">D</th> <td style="background-color: #ADD8E6;">L</td> <td style="background-color: #ADD8E6;">L</td> <td style="background-color: #90EE90;">M</td> <td style="background-color: #90EE90;">M</td> <td style="background-color: #FFFF00;">H</td> </tr> <tr> <th style="background-color: #0000FF; color: white;">E</th> <td style="background-color: #ADD8E6;">L</td> <td style="background-color: #ADD8E6;">L</td> <td style="background-color: #90EE90;">M</td> <td style="background-color: #90EE90;">M</td> <td style="background-color: #90EE90;">M</td> </tr> </tbody> </table>			CONSEQUENCES							1	2	3	4	5	LIKELIHOOD	A	M	H	H	VH	VH	B	M	M	H	H	VH	C	L	M	H	H	VH	D	L	L	M	M	H	E	L	L	M	M	M
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Risk level	Required action
Very high	Act immediately: The proposed task or process activity must not proceed. Steps must be taken to lower the risk level to as low as reasonably practicable using the hierarchy of risk controls
High	Act today: The proposed activity can only proceed, provided that: (i) the risk level has been reduced to as low as reasonably practicable using the hierarchy of risk controls and (ii) the risk controls must include those identified in legislation, Australian Standards, Codes of Practice etc. and (iii) the document has been reviewed and approved by the Supervisor and (iv) a Safe Working Procedure or Safe Work Method has been prepared and (v) the supervisor must review and document the effectiveness of the implemented risk controls
Medium	Act this week: The proposed task or process can proceed, provided that: (i) the risk level has been reduced to as low as reasonably practicable using the hierarchy of controls and (ii) the document has been reviewed and approved by the Supervisor and (iii) a Safe Working Procedure or Safe Work Method has been prepared.
Low	Act this month: Managed by local documented routine procedures which must include application of the hierarchy of controls.

List emergency procedures and controls

List emergency controls for how to deal with fires, spills or exposure to hazardous substances and/or emergency shutdown procedures

For COVID-19 contamination consult UNSW Safe Return to Campus Guidelines <https://unsw.sharepoint.com/sites/safety-wellbeing/Shared%20Documents/COVID-19/Return%20to%20Campus/Safe-Return-To-Campus-Staff-Guide.pdf?cid=298a7a1c-6cef-4f4a-8f0f-4651a9b90049>

In emergency, evacuate area and call security (x56666).

For chemical spills on person, use the safety shower and/or eyewash and call the lab manager (x56224) and/or security (x56666).

For chemical spill in lab, evacuate area and call lab manager (x56224).

In the event of a fume cupboard exhaust failure, close sash, evacuate area and alert lab manager (x56224).

Implementation			
Additional control measures needed:	Resources required	Responsible person	Date of implementation
REVIEW			
Scheduled review date:			
Are all control measures in place?	Yes		
Are controls eliminating or minimising the risk?	Yes		
Are there any new problems with the risk?	No		
Review by: (name)			
Review date:			

Acknowledgement of Understanding

All persons performing these tasks must sign that they have read and understood the risk management (as described in HS329 Risk Management Procedure).

Note: for activities which are low risk or include a large group of people (e.g. open days, BBQ's, student classes etc), only the persons undertaking the key activities need to sign below. For all others involved in such activities, the information can be covered by other methods including for example a safety briefing, induction, and/or safety information sheet (ensure the method of communicating this information is specified here)

Risk management name and version number:		I have read and understand this risk management form	
Name	Signature	Date	

VERSION CONTROL

Date	Version	Details	Person
05-Jun-2020	V1.00	Submitted with ANFF's Safe Return to Work plan	Matt Boreland
19-Jun-2020	V1.01	Approved by UNSW Phoenix Recovery Team Added version control table Correction of typo's/formatting	Matt Boreland