

TREE OF ANDRY



SAFETY NEWSLETTER

Special points of interest:

- DEPARTMENT SAFETY OBJECTIVE & PROGRAMME
- REVISED DEPARTMENT SAFETY POLICY
- NUS SHAPeING CAMPUS SAFETY & HEALTH ALERTS HIGHLIGHTING OUR DEPARTMENT SAFETY SYSTEM
- PRINCIPAL INVESTIGATOR (PI) LAB CERTIFICATION AUDIT
- SAFETY & HEALTH FEEDBACK & SUGGESTION SCHEME
- DEPARTMENT TEAM BONDING

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2015 Department Safety & Health Objectives & Programme


2015 Department Safety & Health Objective						
	Objective	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Current Status
1	To achieve zero reportable accidents to the Ministry of Manpower for 2015	0	0	Ongoing	Ongoing	In Progress
2	100% of the Principal Investigators undergoing PI surveillance audit to pass by 31 December 2015.	In progress	In progress	In progress	In progress	In Progress

2015 Department Safety & Health Programme							
	Objective	Responsible	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Current Status
1	Organize a safety activity every three months (after the Research Administration meeting) to serve as an avenue to raise awareness and provide training for old and new staff	Department Safety Committee	- Safety Quiz & Induction (28/01)	- Safety Quiz & Induction (22/04) - Chemical & GHS (22/04)	- Safety Quiz & Induction (19/04) - Table Top Exercise (Emergency)	Team Bonding (14/12)	Completed
2	Participate in NUS level programs such as ASHPA & PI Certification / Surveillance with regular activities geared to bridge the gaps identified through our PDCA cycle	Staff and Students	- ASHPA Award Ceremony (15/04)	- SHE Conference (14/05) - BCP Exercise (06/05)	PI SMS Certification Audit (Prof Hui-07/09) (Prof Wong-17/09)	-	Completed
3	Conduct an internal Fire Drills at least one a year, in each of the building which our department laboratories occupy, to ensure that staff and students are prepared for emergency evacuation	Department Safety Committee, Facilitator: Dept. Fire Warden	- NUSTEP Fire Drill (31/01)	- MD4 fire drill (09/04) - ODC fire drill (08/05) - NUHS Fire Drill (15/04)	-	-	Completed
4	Conduct one Chemical Safety and one Biological Safety Exercise to familiarize staff and students with emergency spill procedures	Department Safety Committee, Facilitator: Chemical & Biological Safety ICs	-	- Biological & Chemical Spill Response Exercise (21/04)	- Biological & Chemical Spill Response Exercise (15/09)	-	Completed
5	Conduct laboratory safety inspections once in 6 months	Department Safety Committee	Internal Inspection (09/03 to 15/03)	NUSMed NUSTEP & ODC Inspection (25/06)	MD4 Pre-SCDF Internal laboratory Inspection	-	Completed
6	Conduct laboratory Safety Management System audit once a year	Department Safety Committee	-	Internal Audit(15/06 to 21/06)	-	-	Completed
7	Review laboratory safety performance once a year to ensure continual improvement	Principal Investigators & Research Directors	Ongoing	Ongoing	Ongoing	Ongoing	In Progress

2015 Revised Department Safety Policy

As we aspire to continuously level up our safety culture, the Department Safety Policy has been revised. The previous safety policy had **4 * S * T * A * R** principles and the revised safety policy has **5 * S * T * A * R * R** principles. The 5th principle represented by the letter '**R**' for **Review** has been added.

Yang Lan Lin School of Medicine
Yong Loo Lin School of Medicine, NUS



Department of Orthopaedic Surgery Department Safety Policy		Document ID: Revision Number:	DOS-S01-01 02
Issue Date: 01 November 2009	Revision Date: 28 October 2015	Next Review: 28 October 2018	
Prepared by: Low Siew Leng & Department Safety Committee		Approved by: A/Prof. Wilson Wang	

Department of Orthopaedic Surgery Safety Policy

The Department of Orthopaedic Surgery is dedicated to provide a safe working environment for their staff, students and visitors. We are committed to comply with all applicable occupational safety and health legislation, guidelines and standards that NUS subscribes to; and other corporate policies that NUS adopts through the Office of Safety, Health and Environment (OSHE). We are committed to take all reasonable precautions to ensure that our laboratories and workplaces are fully compliant with NUS Safety, Health Policies and Standards.

Our guiding '**STAR**' principles are:


- S**afety & Health - Ensuring safety is a top priority in our operational procedures. We will develop appropriate protocols for department specific work practices. We advocate medical surveillance for staff and students engaged in department research activities. We will safeguard all our stakeholders' by implementing a Safety Management System to minimize injuries and ill health.
- T**rainning - We encourage all staff to attend the safety seminars and courses organized by OSHE. New staff and students will undergo safety induction training by more experienced personnel who will pass on the concepts of safety in operational practices in our laboratories.
- A**wareness - We provide information about health and safety issues to all our staff and students, including identifying and updating knowledge of potential hazards on a regular basis, sharing with each other best practices.
- R**esponsibility - To ensure that safety compliance is the responsibility of every staff and student in the department. Each Principal Investigator is ultimately responsible for the compliance of the team under the NUS Safety, Health Policies and Standards.
- R**evision - Continuously review our safety management systems through the PDCA cycle to identify gaps and ensure continual improvement in order to meet or exceed best safe practices

We will manage Occupational Health & Safety by conducting the necessary Risk Assessments in a Team, leveraging on the skills set and expertise of each member. We will identify and minimize hazards with the appropriate Operational Controls.

The Department Safety Committee has the mandate to highlight unsafe practices and encourage and educate staff and students to adopt better work procedures.

The Department will ensure areas under its management have adequate resources and funding for its Safety Management System.

Endorsed by:



A/Prof Wilson Wang Ee Jen
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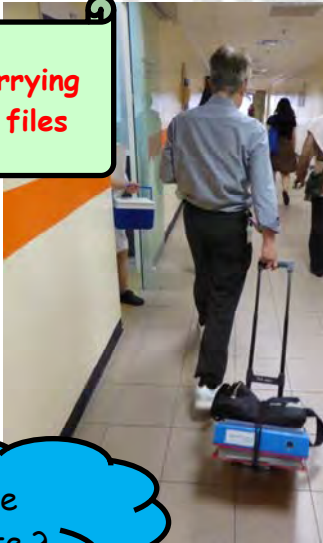
PI Lab Certification Audit -NUSTEP Lab (Prof James Hui)
{07th September 2015}

Pre-Audit Meeting with Auditors and members of the PI team



Safe way of carrying so many heavy files

Prof James Hui Lab



Meticulous Checking of documents



Are you sure the spill kit is complete ?



Confused!!!



PI Lab Certification Audit -NUSTEP Lab (Prof HK Wong) {17th September 2015}

Pre-Audit Meeting with Auditors and members of the PI team

Let's get started !!!



Lab inspection is about to start !!!



Prof HK Wong Lab

I better let Raymond answer the questions



Thorough checking of chemicals inside lab

The Tree of Andry

Safety & Health Feedback & Suggestion Revised Scheme (October 2015)

As part of our continuous effort in encouraging more department staffs & students to participate in the safety and health feedback and suggestion scheme, we have revised the old form. Provided you can achieve a minimum of 3 points, we will award you with vouchers.

Safety, Health & Environment and Emergencies		
Does the suggestion improve Safety & / or Occupational Health through		
• Elimination of hazards?	Yes / No	Yes = 1 pt
• Substitution of a less hazardous material/procedure?	Yes / No	
• Engineering controls (e.g. equipment / work processes that reduce source of risk exposure)	Yes / No	
• Administrative controls (e.g. altering work procedure and work practices)	Yes / No	
Does the suggestion improve personal physical Health & / or mental Well-being?	Yes / No	Yes = 1 pt
• (e.g. alarm to take a break every 4 hours)		
Does the suggestion address Environmental issues by saving resources? (e.g. reduce, recycle or reuse resources, etc)?	Yes / No	Yes = 1 pt
Does the suggestion address an Emergency situation? (e.g. when the incident happens out of office hours)	Yes / No	Yes = 1 pt
Implementation (in your opinion)		
Is the suggestion innovative?		
• (e.g. Yes = "Hmm, I never thought of that!", No = "I have thought of it, but didn't have the funds for it")	Yes / No	Yes = 1 pt
How many research workplaces can benefit from this suggestion?		
a. 1 Laboratory (limited to a laboratory or research group)	(a) / (b)	(a) 1 pt
b. 2 OR MORE Laboratory (limited to a laboratory or research group)		(b) 2 pt
Can the office workplace benefit from this suggestion? (also includes researchers sitting workplace)	Yes / No	Yes = 1 pt
Is the suggestion practical and feasible to be implemented	Yes / No	Yes = 1 pt
Can the suggestion be implemented at higher level (e.g. faculty or university level)	Yes / No	Yes = 1 pt
	Total Points	10 pts max

8-10 point = \$50

5-7 point = \$40

3-4 point = \$20

<http://www.med.nus.edu.sg/os/safety/suggestion.html>

Improved Chemical Order Form & Data Backup System Suggestion Winners for October 2015

Whatever improvement ideas you have for the office or labs, please feel free to fill up the form and win \$20, \$40 or \$50 vouchers for your suggestions and feedbacks



Respirator (N95 mask) Fitting Test (December 2015)



Briefing by Nurse Kim from The Occupational and Diving Medicine Centre, NUS

N95 mask must not have any gap !!!



1. Ensure the mask is fitted properly



2. Put the space suit and spray inside to check suitability of the mask



3. Move the head around (left, right, up & down)



4. Stand and bend 3 times followed by spraying again

Respirator Fitting Test for N95 mask is required for staffs & students handling biological specimens and fluids as well as for those involved in biological spill cleaning exercise

2015 SHAPEing CAMPUS SAFETY & HEALTH ALERTS (August to October 2015)

AUGUST 2015

SEPTEMBER 2015

SHAPEing Campus Safety and Health

Sharing Best Practices · Honouring Safety Champions
Alerts & Advisories · Policy Updates · Enhancing Safety Culture

August 2015

Sharing Best Practices

Catch up on laboratory safety and health best practices with these online resources

These informative safety videos will give you a better understanding of best laboratory safety practices.

>> [Read more](#)



Honouring Safety Champions

Our safety volunteers @ 28th Southeast Asian (SEA) Games

We recognize the efforts of our very own NUS staff who volunteered as risk assessment officers at the 28th SEA Games.

>> [Read more](#)



Alerts & Advisories

Finger saving tips when using the microtome!

Slice your samples, not yourself. Keep your fingers intact by learning more about the importance of microtome safety, and tips on safe usage.

>> [Read more](#)



Chemical release from centrifuge tube: danger of pressure build-up

The contents of a centrifuge tube were released in an uncontrolled manner in a laboratory. Learn how to prevent this from happening in your laboratory.

>> [Read more](#)



Policy Updates

All new staff to undergo mandatory safety and health induction training

The new requirements are part of NUS' commitment to ensuring the safety and health of all staff.

>> [Read more](#)



Enhancing Safety Culture

New online safety and health training for laboratory ergonomics

Stiff neck from using the microscope? This online training will teach you how to manage ergonomic hazards at your workstation/lab bench.

>> [Read more](#)



SHAPEing Campus Safety and Health

Sharing Best Practices · Honouring Safety Champions
Alerts & Advisories · Policy Updates · Enhancing Safety Culture

September 2015

Sharing Best Practices

Training chemists to be Safety-Ready!

Check out what the Department of Chemistry has in place to make their students Safety-Ready!

>> [Read more](#)



Honouring Safety Champions

A fulfilling journey as a safety advocate

The journey in achieving safety advancement is never a bed of roses, but it can be fulfilling with one's determination and passion. Find out how Mrs Teresa Ang, a safety advocate at Department of Pharmacy, overcomes challenges and finds fulfilment in her safety journey.

>> [Read more](#)



Alerts & Advisories

Explosion of pressure tube – dangers of working above atmospheric pressure

A recent pressure tube explosion shattered the sash of a fume cupboard. Learn how to safely conduct high-pressure reactions.

>> [Read more](#)



Chemical incident involving release of ammonia gas

In a recent incident, inappropriate storage conditions resulted in the release of ammonia gas into the laboratory environment.

>> [Read more](#)



Enhancing Safety Culture

"A rising STAR in safety" - The Department of Orthopaedic Surgery's approach to safety and health management

The Department of Orthopaedic Surgery stands out among departments when it comes to winning safety awards. Hear more about their "STAR" principle that ignites their staff and students' desire to adopt a positive and proactive safety mindset.

>> [Read more](#)



Sharing Best practices

Honouring Safety champions

Alerts & Advisories

Policy Updates

Enhancing Safety Culture

SHAPE is a new safety newsletter developed by OSHE and aims at communicating CAMPUS SAFETY & HEALTH ALERTS to all staffs & students on a monthly basis



For more detail, please check:
https://inetapps.nus.edu.sg/osh/portal/safety_updates/shape/shape.html

September 2015 SHAPEing Issue (Department of Orthopaedic Surgery in the Spotlight)

SHAPEing Campus Safety and Health

Sharing Best Practices • Honouring Safety Champions • Alerts & Advisories • Policy Updates • Enhancing Safety Culture

"A rising STAR in safety" - The Department of Orthopaedic Surgery's approach to safety and health management

Published Sep 2015 | By Dr Vernon Seow & Mr Dominic Tey | Enhancing Safety Culture

Since its inception in 1952, the Department of Orthopaedic Surgery has played a crucial role in education, research and clinical service. Over the years, the Department has also built a reputation for quality research in orthopaedic surgery, especially in the areas of tissue engineering, osteoporosis and fractures, and orthopaedic bioengineering. The Department of Orthopaedic Surgery is also dedicated to providing a safe working environment for their staff, students and visitors as stated in their departmental mission. This is also emphasized in their safety policy, which has a title of "Safety starts with STAR". The STAR principles being "Safety & Health", "Training", "Awareness" & "Responsibility". More information about the STAR principles can be found in the table 1. The "STAR" principles are also embedded in the Departmental Safety and Health management system as detailed in Figure 1.

Safety & Health	Ensuring safety is a top priority in our operational procedures. We will develop appropriate protocols for department specific work practices. We advocate medical surveillance for staff and students engaged in department research activities. We will safeguard all our stakeholders' by implementing a Safety Management System to minimize injuries and ill health.	The department welcomes any feedback and suggestions on safety, health & environment issues via feedback & suggestion system (FSS) http://medicine.nus.edu.sg/os/safety/suggest.jsp.html
Training	We encourage all staff to attend the safety seminars and courses organised by OSHE. New staff and students will undergo safety induction training by more experienced personnel who will pass on the concepts of safety in operational practices in our laboratories.	"We will manage Occupational Health & Safety by conducting the necessary Risk Assessments in a Team, leveraging on the skills set and expertise of each member. We will identify and minimize hazards with the appropriate Operational Controls." ORTHO
Awareness	We provide information about health and safety issues to all our staff and students, including identifying and updating knowledge of potential hazards on a regular basis, sharing with each other best practices.	<i>Professor Wang Hee Kit</i> Head, Department of Orthopaedic Surgery
Responsibility	To ensure that safety compliance is the responsibility of every staff and in the department. Each Principal Investigator is ultimately responsible for the compliance of the team under the NUS Safety, Health Policies and Standards. Our safety practices are documented and regularly reviewed by the Department Safety Committee, with the commitment to ensure that all staff and students adopt safe work procedures. The Committee will periodically review the Safety Management System to identify any gaps and ensure continual improvement. The Department Safety Committee has the mandate to highlight unsafe practices and encourage and educate staff and students to adopt better work procedures.	

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Table 1: "STAR" Principles to guide department's safety and health management system

Enhancing Safety Culture

"A rising STAR in safety" - The Department of Orthopaedic Surgery's approach to safety and health management



The Department of Orthopaedic Surgery stands out among departments when it comes to winning safety awards. Hear more about their "STAR" principle that ignites their staff and students' desire to adopt a positive and proactive safety mindset.

SHAPEing Campus Safety and Health

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Departmental Safety Committee

The department's safety & health management system is maintained by the Departmental Safety Committee (DSC). The committee is chaired by the A/Prof. Wilson Wang, who is the department's Research Director. The current committee comprises representatives from all of the core laboratory facilities and research laboratories (refer to Figure 2).



Figure 2. The Department Safety Committee (Orthopaedic Surgery)

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Figure 1. Department of Orthopaedic Surgery uses the PDCA cycle to continuously improve every element of its SHMS.

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The department has also participated in other OSHE safety promotional activities such as Safety and Health Improvement Programme (SHIP) & SafetyMatlon. In 2010, the "Keep Going's Fabricating an X-ray board for taking X-rays" and "Chemwiki's Online Chemical & Safety Database" projects won the silver and consolation award respectively. In 2011, the "An Energy Saving Transfer Board When Using X-ray on Large Animal during Surgery" project won the silver award. In 2012, "Be DEFT Not Deaf" project received the consolation prize in SafetyMatlon scheme. In 2013, the department was awarded the commitment award for their project entitled "A customized Trolley System with Heavy Duty Biological Containers Equipment". A detailed listing of their awards and the various safety improvement projects is given in table 2.

Year 2009	Year 2010	Years 2011 & 2012	Years 2013 & 2014
Emerging Safety Culture	Managing Safety	Involving & Cooperating safety culture	Continually improving safety culture
<ul style="list-style-type: none"> Established Department Safety Policy Established the Department Safety Committee Dept. Core Facilities Laboratories starts documenting safe work practices in SOPs Dept. Core Facilities Laboratories started conducting risk assessments for routine work Safety Activities after Department Research Admin Meeting 	<ul style="list-style-type: none"> "The Tree of Andry" department safety newsletter launched Implement online Feedback & Suggestion scheme Emergency Management - Fire Evacuation Drills Dept. Core Facilities Laboratories completed conducting risk assessments for routine work 	<ul style="list-style-type: none"> Department level training by OSHE for department for all research & lab staff in Safety & Health Management System & Risk Management Appointment of Safety Leads by PIs 	<ul style="list-style-type: none"> 2015 ASHPA Commendation Improved Internal Lab Inspections & Audit checklists with prompts 2 stage SHMS audit (pre-audit review and onsite audit) Emergency management <ul style="list-style-type: none"> Biological & chemical spills posters table top exercise (after hours emergency) CPR & AED familiarisation Risk Management for Office staff PI Business Continuity Programme
<ul style="list-style-type: none"> 2010 ASHPA Merit Award with Commendation 2010 	<ul style="list-style-type: none"> 2011 ASHPA Silver Award 	<ul style="list-style-type: none"> 2013 ASHPA Commendation 	

Table 2: A chronological listing of safety programmes and projects over the years

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https://share.nus.edu.sg/osh/shape/OSHE%20newsletter%20archive/2015/09%20-%20September/Production/SHAPE%20-%2020Sep%202015_Enhancing%20Safety%20Culture_Ortho.pdf

2015 SHAPEing CAMPUS SAFETY & HEALTH ALERTS (October to November 2015)

OCTOBER 2015

NOVEMBER 2015

SHAPEing Campus Safety and Health

Sharing Best Practices · Honouring Safety Champions
Alerts & Advisories · Policy Updates · Enhancing Safety Culture

October 2015

Sharing Best Practices

Sharing safety best practices with Universitas Indonesia

OSHE in partnership with various NUS departments, played host to over 35 delegates from Universitas Indonesia recently and shared the NUS Safety & Health Management System with them.

>> [Read more](#)



Honouring Safety Champions

"Safety in numbers – It is never a one man or woman effort!"

Managing safety in a high risk facility is never an easy task. Find out how Dr Sabai Phyu, Deputy Director of the NUS Medicine BSL-3 Core Facility rides on a strong teamwork culture to ensure the highest safety standards in NUS' high containment facility.

>> [Read more](#)



Alerts & Advisories

Office hazards – storage of items at height

A seemingly innocuous activity involving retrieving an item from the book shelf resulted in a serious injury. Don't let it happen to you!

>> [Read more](#)



Policy Updates

Making laboratories more safe and secure with updated regulatory recommendations

Working with biological agents and toxins? Here are some updates to the Biological Agents and Toxins Act (BATA).

>> [Read more](#)



Revision to Training Requirements for NUS First Aiders

Based on a new set of criteria, nominated first aiders will now attend training appropriate for their respective workplaces.

>> [Read more](#)



SHAPEing Campus Safety and Health

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November 2015

Sharing Best Practices

Keeping it spark proof! Some key tips to prevent electrical fires on campus

Thinking of putting up Christmas lights? Here are some tips to ensure that they stay as safe sources of light and not of fire.

>> [Read more](#)



Going for a holiday soon? We give the doctor's take on whether you should get the flu vaccine

Flu vaccinations offer a variety of benefits in addition to protecting yourself from a flu.

>> [Read more](#)



Honouring Safety Champions

A decade of administrative leadership for safety and health excellence in NUS: Mr Joseph Mullinix

In recognition of his contributions in driving safety and health excellence in NUS, Mr Mullinix was awarded the Distinguished Safety & Health Leadership Award.

>> [Read more](#)



Policy Updates

Enhanced NUS Safety Training now gives you more choices and directions

The enhancement aims to ensure the highest safety and health standards in NUS. Learn more about the new progressive training structure and the launch of new training modules.

>> [Read more](#)



Enhancing Safety Culture

Season of Safety & Health events on campus: A snapshot of events at CeLS, FoS and T-Lab

The 3 departments held their respective safety events to raise awareness and highlight the importance of safety in the campus.

>> [Read more](#)



Hearing it from NUS Senior Management - strategic directions for safety and health in NUS

OSHE recently met up with the NUS Senior Management team to get a better understanding of their vision for safety and health in the University.

>> [Read more](#)



Accidents can happen in the office also



Department Team Bonding (December 2015)

Give me all your money!!!

Palm Reader Expert!!!

Journal Review
in progress !!



Ladies Power !!!

Team Bonding Event at
Escape Hunt followed
by Buffet Dinner at
Chef Wan '1 market'



The BIG Buffet

Yummy
Delicious Food
Anyone !!!

