

AN EFFECTIVE SAFETY AND HEALTH IMPLEMENTATION THROUGH MALAYSIA'S MANUFACTURING HAZARD DATABASE

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INCLUSIVE?

PAPER BASED?

MONITORING?

HAZARD

WHO?

IDENTIFICATION

WHY?

HOW?

FACILITATE RISK PREVENTION CULTURE?

TIME CONSUMING?

EFFECTIVE?

A thorough **HAZARD IDENTIFICATION** process is the foundation of good risk management, without which, risk may be missed, misunderstood and mis-managed.

The **NON-IDENTIFICATION OF HAZARDS** as one of the “root causes” for workplace injuries, illnesses and incidents and that a proactive, ongoing process to identify and assess such hazards is a **CRITICAL ELEMENT OF ANY EFFECTIVE SAFETY AND HEALTH PROGRAM**

Most workers are unable to **PROPERLY IDENTIFY THE WORKPLACE POTENTIAL HAZARDS** so that the risk of work becomes greater

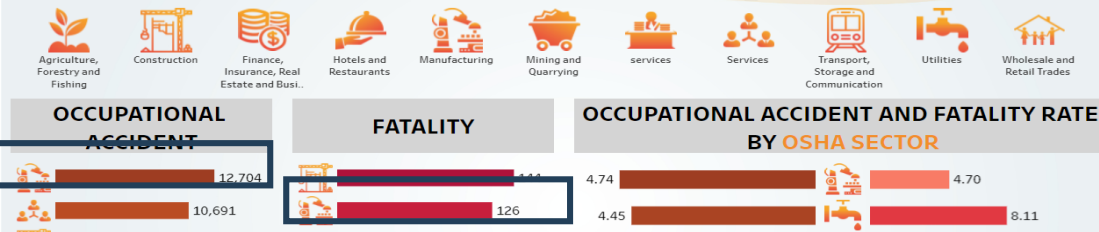
The **DIRECT COST OF INCIDENT IS USD7,000 AND A WORKPLACE FATALITY IS USD910,000.**



National Occupational Accident 2019

HOME DEMOGRAPHIC PROFILE **OSHA SECTOR** ACCIDENT DETAILS

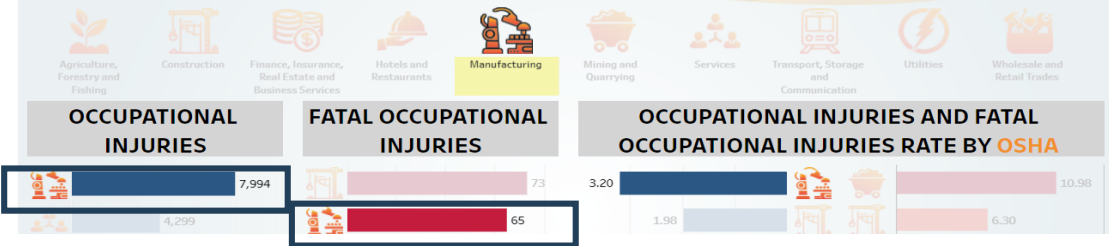
OCCUPATIONAL ACCIDENT AND FATALITY BY OSHA SECTOR



National Occupational Accident and Disease Statistics 2021

Select State (All)

OCCUPATIONAL INJURIES AND FATAL OCCUPATIONAL INJURIES BY OSHA SECTOR

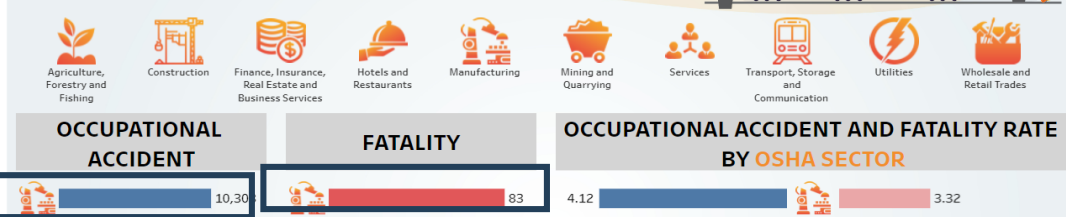


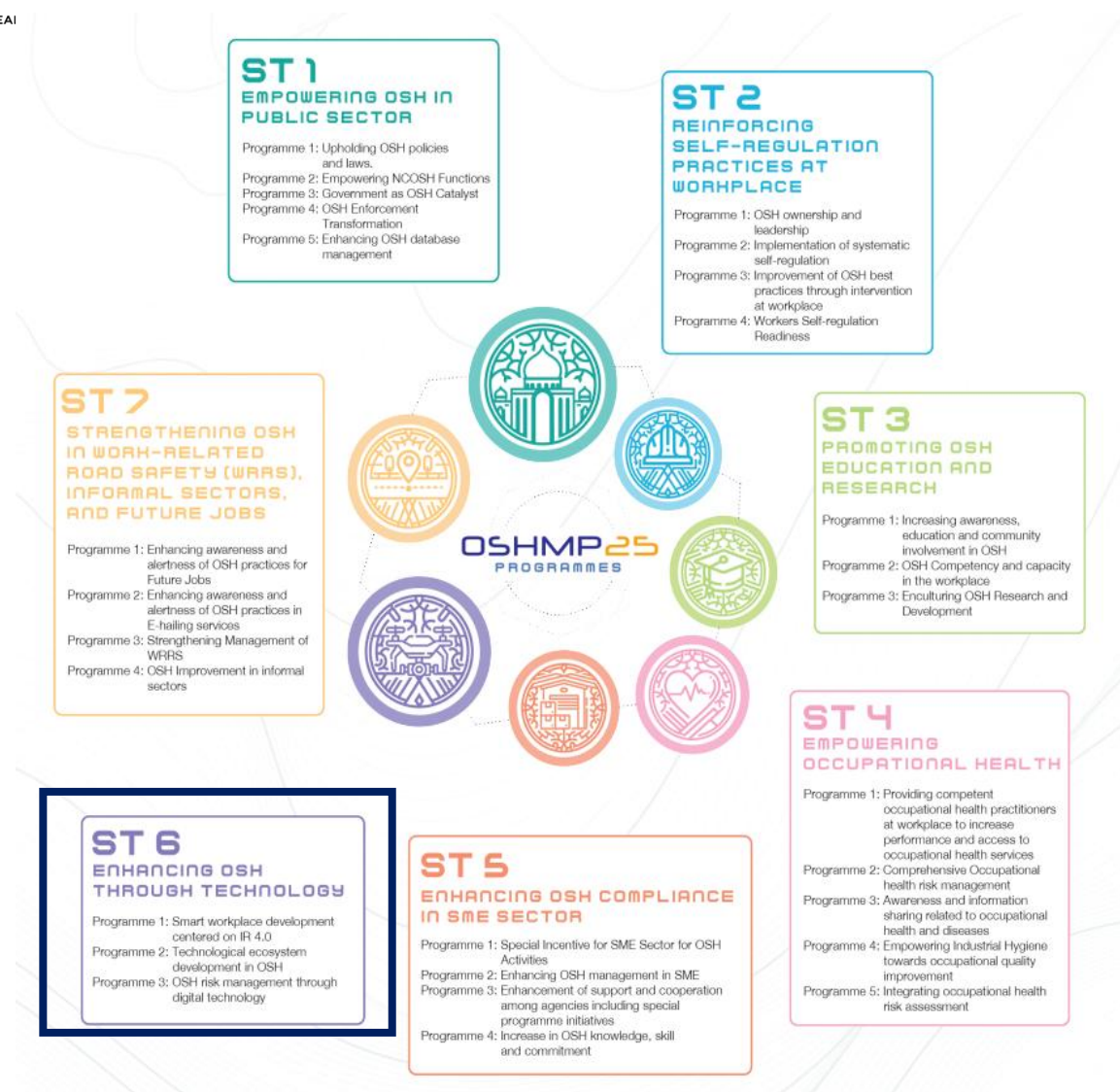
National Occupational Accident 2020

HOME DEMOGRAPHIC PROFILE **OSHA SECTOR** ACCIDENT DETAILS

Select State (All)

OCCUPATIONAL ACCIDENT AND FATALITY BY OSHA SECTOR





HAZARD WEB DATABASE FOR MALAYSIA'S MANUFACTURING INDUSTRY

Comprehensive hazard identification shall decrease incidents and increases workplace safety

Possession of **sufficient OSH knowledge** and experience among employers and workers

Hazard-related data from **best practices and research studies**

Mapping of hazards with manufacturing parameters -> **complete hazard identification.**



Production Process
<ul style="list-style-type: none"> Mixing Cooking Transfer QC Packing Palletising Delivery
Raw Material
<ul style="list-style-type: none"> Chemical and other
Manufacturer
<ul style="list-style-type: none"> Location/layout Infrastructure Segment
Machineries
<ul style="list-style-type: none"> Mixing Tank Trolley Forklift Cooker Boiler Sealer



DATA DIGITALISATION ON HAZARD IDENTIFICATION, RISK ASSESSMENT AND RISK CONTROL (HIRARC) WITH WEB-BASED APPLICATION AND DESCRIPTIVE/ PREDICTIVE ANALYTIC DASHBOARD FOR MANUFACTURING INDUSTRY

Phase 1

Hazard Knowledge Base
<ul style="list-style-type: none"> Hazard- Parameters mapping (e.g. Hazard – Process mappings, Hazard – machines mapping) Other hazard-related data and information

Phase 2

Descriptive/Predictive Analytic Dashboard

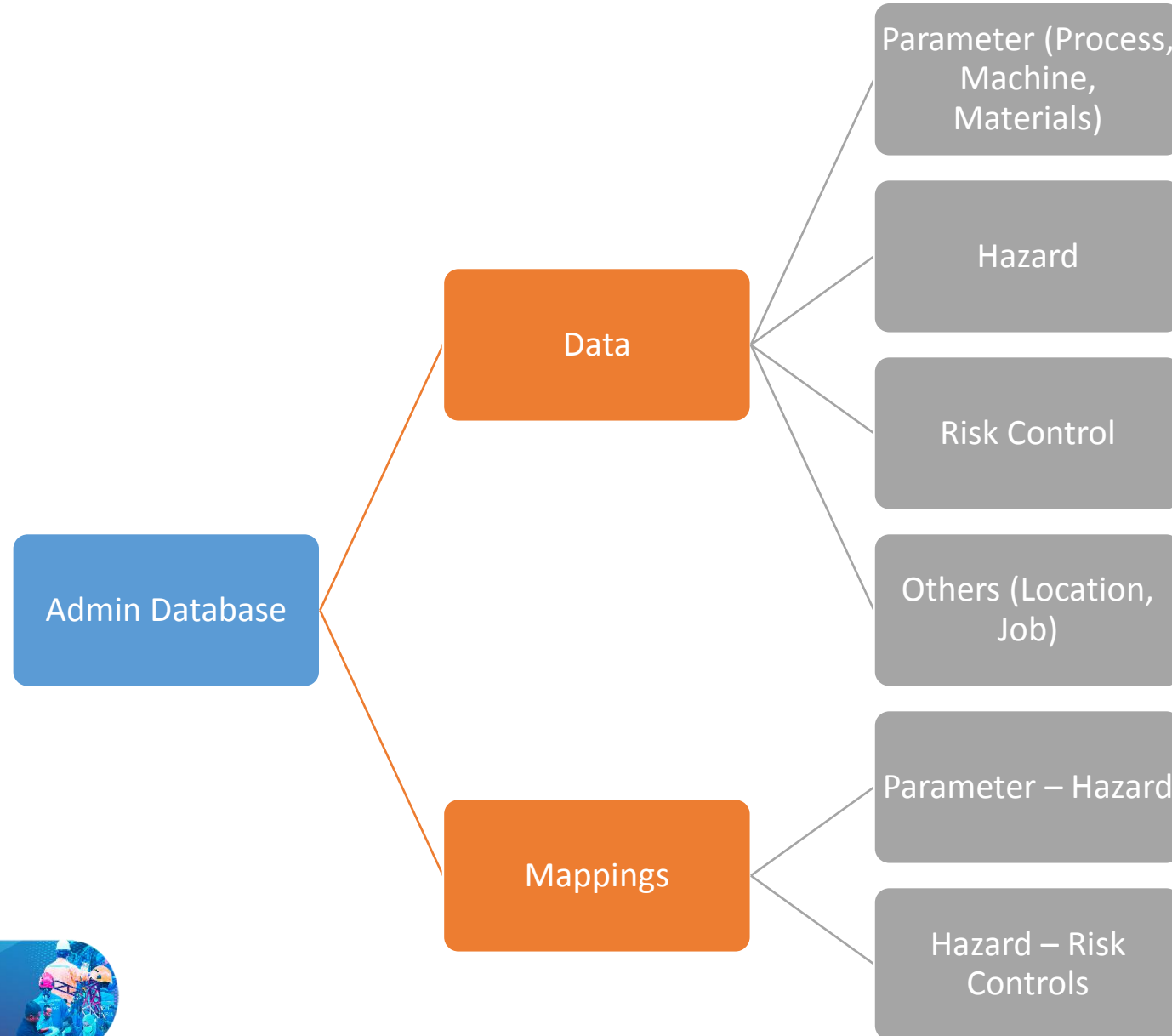
Phase 3

Web-based Application

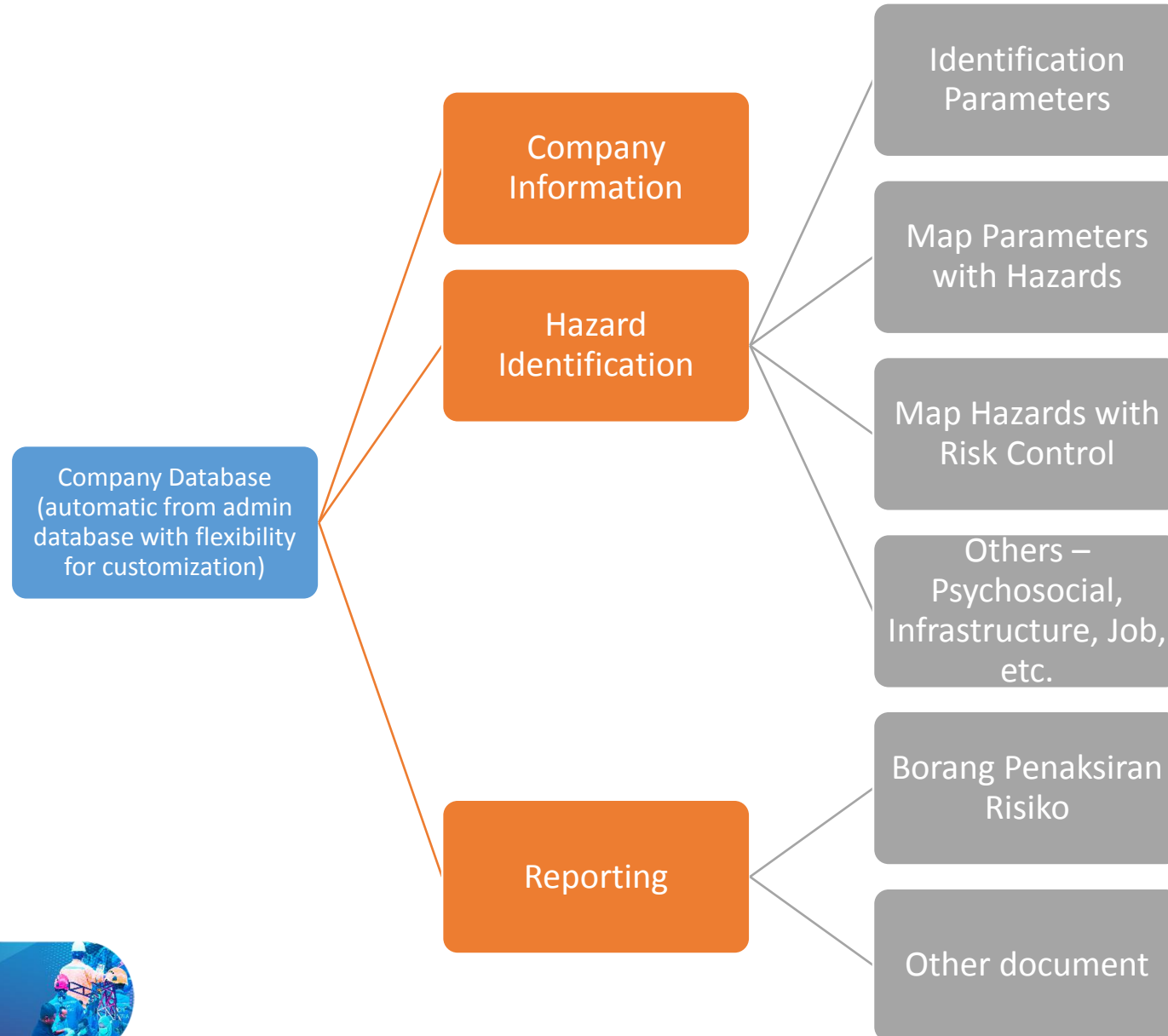
FUNDED BY



Hazard Web Database: Admin



Hazard Web Database: Company



Hazard Web Database: Features

Integrated and
Mapped Database

Generate and
Export Hazard
Reports

Sector based on
Malaysia Standard
Industry
Classification

Step-by-Step Menu
for Hazard
Identification

Data Source
Reference Link

Role-based
Dashboards

Pick and Choose
Interface

Flexible:
Add/Customise
Hazard Data



COSH

SCIC SH



2024
24th CONFERENCE AND EXHIBITION ON OCCUPATIONAL SAFETY AND HEALTH

6th SCIENTIFIC CONFERENCE ON OCCUPATIONAL SAFETY AND HEALTH



DATA SOURCES



Hazard Identification, Risk Assessment and Risk Control (HIRARC)

in Malaysia's Manufacturing Environment

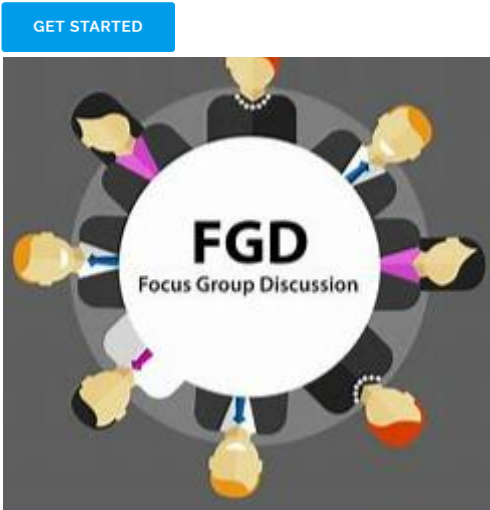


Image from vectorstock.com



Daftar Kemalangan, Kejadian Berbahaya, Keracunan Pekerjaan dan Penyakit Pekerjaan

YEAR	SUB-SECTOR	OSHA	JANTINA	TARIKH LAJAK	UMUR	GROUP FAEDAH	SEBAB KEMALANGAN
2017	Pengilangan	Pembuatan	Lelaki			Maut	Striking against moving objects
2017	Pengilangan	Pembuatan	Lelaki			Maut	Other types of accident, not classif
2017	Pengilangan	Pembuatan	Lelaki			Maut	Other types of accident, not classif



Safety and health in textiles, clothing, leather and footwear

UNITED STATES DEPARTMENT OF LABOR
 Occupational Safety and Health Administration

OSHA STANDARDS ENFORCEMENT TOPICS HELP AND RES

By Standard Number / 1910.178 - Powered industrial trucks.

- Part Number: 1910
- Part Number Title: Occupational Safety and Health Standards
- Subpart: 1910 Subpart N
- Subpart Title: Materials Handling and Storage
- Standard Number: 1910.178
- Title: Powered industrial trucks.
- Appendix: A
- GPO Source: e-CFR

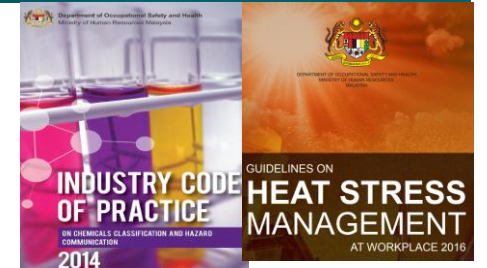
BS EN 415-3:2021 - TC

Safety of packaging machines - Form, fill and seal machines; fill and seal machines

Current · Published on: 31 Oct 2021

Available Variants

Tracked Changes £464.00 Standard £356.00



Data Collection : Primary Data

- Access to the hazard database via web application system
- Review and testing of the hazard database and web application system
- Input/Feedback on the hazard database and functionalities of the web system
- From both the Manufacturing Companies and Domain Experts

WORKSHEET – DATA COLLECTION FROM MANUFACTURING INDUSTRY

Name:
Company:
Subsector:
Signature:

Date:

Day 1 : 8 August 2023		
Time	Activity	Roles
9:00 am - 9:30 am	Registration and Welcome Tea/Coffee	All
9:30 am - 9:45 am	Welcome Remarks	En. Azhar bin Ahmad National Institute of Occupational Safety and Health (NIOSH)
9:45 am - 10:30 am	Hazard Database for Malaysia's Manufacturing Industry: Project and Workshop Information	SIRIM
10:30 am - 12:30 am	Awareness session: INDUSTRY CODE OF PRACTICE (ICOP) ON OSH RISK MANAGEMENT	En Bahrudin bin Mamat Department of Occupational Safety and Health (DOSH) Selangor
	Running Tea Break	
12:30 pm - 2:00pm	Lunch Break & Prayer	All
2:00 pm - 5:00 pm	Worksheet Session 1: General Overview and Feedback on the Hazard Database Web Application and Parameter Identification	All
	Running Tea Break	

Day 2 : 9 August 2023		
Time	Activity	Roles
9:00 am - 11:00 am	Worksheet Session 2: Review/Feedback on Parameters (Process, Machines, Materials, Job, etc.)	All
	Running Tea Break	
11:00 am - 12:30 am	Worksheet Session 3: Review/Feedback on Hazard Data	All
	Running Tea Break	
12:30 pm - 2:00pm	Lunch and Prayer Break	All
2:00 pm - 5:00 pm	Worksheet Session 2: Review/Feedback on Risk Control and other data	All
	Running Tea Break and Dismiss	



Data Collection : Secondary Data

https://www.ilo.org/safework/info/publications/WCMS_113135/lang--en/index.htm

Countries Topics Sectors Search ilo.org

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Occupational Safety and Health >

ILO home > About the ILO > How the ILO works > Organizational structure > Occupational Safety and Health > Knowledge base > Publications and technical tools > **International Hazard Datasheets on Occupations (HDO) ...**

International Hazard Datasheets on Occupations (HDO)

The International Hazard Datasheets on Occupations is a multipurpose information resource containing information on the hazards, risks and notions of prevention related to a specific occupation. The datasheets are intended for those professionally concerned with health and safety at work.

News and statements >
 Areas of work > [+]
 Sectors and industries >
 Knowledge base > [-]
 Standards and other instruments > [+]
 Policy documents >
Publications and technical tools

we've organised our information into hazard topics. Topics are listed alphabetically below.

- Asbestos
- Bullying
- Bushfire smoke impacts in the workplace
- Carcinogen
- Chemicals
- Laser classifications
- Lead
- Lifting, pushing and pulling (Manual tasks)

https://www.foodsafety.govt.nz/registers-lists/hazards/index.htm?setup_file=hazards.setup.cgi&dmode=b...

Ministry for Primary Industries
 Manatū Ahu Matua

Hazard Database

148 search results:
 Show details for all items below

Food Type	Hazard	
Aerosol cream	Listeria monocytogenes	Detail
Apples	Enterobacteriaceae	Detail
Apples	Enterobacteriaceae	Detail
Beef (raw)	Salmonella	Detail
Beef (raw)	STEC	Detail
Beef (raw)	Campylobacter jejuni	Detail

https://www.comcare.gov.au/safe-healthy-work/prevent-harm/physical-hazards

Australian Government Comcare
 The national work health and safety, and workers' compensation authority

News Training Events Forms Careers Contact us

Your role **Safe & healthy work** Claims & rehabilitation Service providers Scheme & legislation About us Search

Safe & healthy work > Preventing harm and injury at work > **Physical hazards**

Preventing harm and injury at work

- Changes to WHS laws
- Manage risks in the workplace
- Conduct workplace inspections
- Physical hazards**
- Chemical hazards
- Biological hazards
- Coronavirus (COVID-19)

Physical hazards

For: **Employers and managers** **Information seekers**

Physical hazards are factors or conditions within the environment that can harm your health.

Types of physical hazards

The main factors and conditions associated with physical hazards include:

https://www.cdc.gov/niosh/topics/hazards.html

CDC Centers for Disease Control and Prevention
 CDC 24/7: Saving Lives, Protecting People™

The National Institute for Occupational Safety and Health (NIOSH)

Workplace Safety and Health Topics

- Workplace Safety and Health Topics
- Industries & Occupations
- Hazards & Exposures**
- Diseases & Injuries
- Safety & Prevention
- Chemicals
- Emergency Preparedness & Response

Hazards & Exposures

Print

- [Abrasive Blasting](#)
- [Aerosols](#)
- [Anthrax](#)
- [Antineoplastic Agents](#)
- [Asphalt Fumes](#)

1. How to use this database?

1.1. Browsing

You may either browse the database by country or compare different countries by category (left margin).

"Browse by country"
 "Browse by country" provides you with the opportunity to generate a country profile or to access specific information for a selected country. By clicking on the relevant country and on the specific items you are interested in, the database will take you to that country report or to the specific information you are looking for.

"Compare countries"
 This allows you to compare information across different countries. To conduct a search, select two or more countries and determine the topics you would like to compare (or choose all topics to see a wider range of data). Only countries for which the database contains data are displayed. Please note that countries on which the database contains data, but not on the selected category/categories, cannot be ticked. By clicking on "Compare", the system generates a HTML web page with the requested information.

1.2. Search

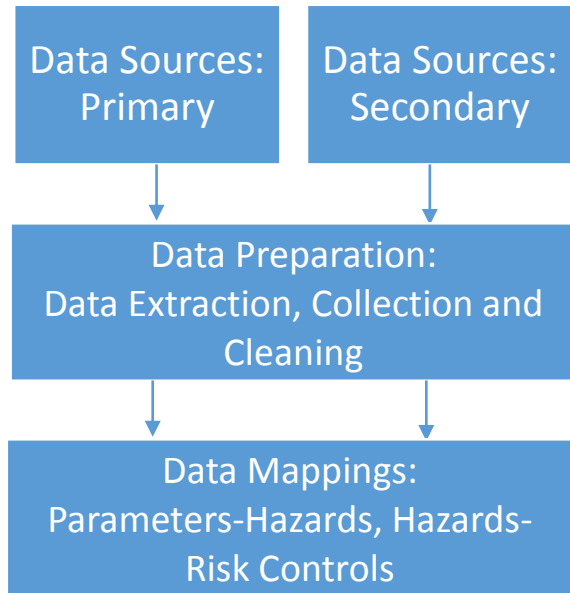
The free search mechanism is based on basic boolean search operators:

- occupational, will find all entries with the word occupational;
- occupational health, will find all entries with the words occupational AND health, but not necessarily together;
- occupational AND health, will find all entries with the words occupational AND health, but not necessarily together;
- disease OR accident, will find all entries with the word disease OR the word accident;
- occupational health NOT agriculture, will find all entries with the words occupation AND the word health but NOT the word agriculture;
- "safety officer", will find all cases with the expression "safety officer", i.e. the two words are together.

Phrase searching is possible by putting words in quotation marks (e.g. "occupational safety and health officer").

To conduct a search, type your search word and then select one or more countries. You can also select specific items or topics if you want to narrow your search even further.

Data Collection



Identification of data sources is conducted via internet keyword search for Health and Safety Organisation to discover websites, forums, social media groups, and other online platforms where data can be extracted

Data extraction and collection is conducted using internet search via keyword with search terms such as hazard, hazard + manufacturing, hazard + production, hazard + factory, “hazard database”.

The search keywords are then expanded through search suggestions, autocomplete features, and related searches such as hazard + “production process”, hazard + “production machine”, hazard + ”production machine”, hazard + “production materials”, hazard + “risk control”, hazard + mappings.



Database Design

hirarc_db tbl_machine

id : int(11)
machine : varchar(255)
sectorID : varchar(50)
hazard : text
remark : text
remark2 : text
reference : text

hirarc_db tbl_material

id : int(11)
material : varchar(2000)
hazard : text
control : text
remark : text
reference : text

hirarc_db tbl_hazardmachine

id : int(11)
machineID : int(11)
hazardID : int(11)

hirarc_db tbl_hazardmaterial

id : int(11)
materialID : int(11)
hazardID : int(11)

hirarc_db tbl_hazardlisting

id : int(11)
hazard : text
type : varchar(255)
health : text
accident : text
injury : text
likelihood : text
severity : text
disease : text
remark : text
remark2 : text
risk_control : text
reference : text
active : int(10)

hirarc_db hazarddetails

id : int(11)
comp_id : int(11)
hazard_id : int(11)
hazard_others : varchar(50)
likelihood_id : int(11)

hirarc_db tbl_process

id : int(11)
process : text
sectorID : text
hazardID : text
remark : text

hirarc_db tbl_riskcontrol

id : int(11)
risk_control : text
type : text
remark : text
risk_strategy : text
description : text
reference : text
swp : int(11)
swp_all : varchar(5)

hirarc_db tbl_hazardprocess

id : int(11)
processID : int(11)
hazardID : int(11)

hirarc_db tbl_infra

id : int(11)
hazard : text
remark : text
risk : text
reference : text

hirarc_db tbl_risktype

id : int(11)
risktype : varchar(50)

hirarc_db tbl_sector

id : int(6)
sector : varchar(255)

hirarc_db tbl_location

id : int(11)
location : text

hirarc_db tbl_warehouse

id : int(11)
hazard : text
risk : text
remark : text

hirarc_db tbl_injury

id : int(10)
injury : text



Server: 127.0.0.1 » Database: hirarc_db

Structure SQL Search Query Export Import Operations Routines Events Triggers Designer

Filters

Containing the word:

Table	Action	Rows	Type	Collation	Size	Overhead
company		115	InnoDB	utf8mb4_general_ci	48.0 KiB	-
companydetails		64	InnoDB	latin1_swedish_ci	64.0 KiB	-
hazardcause		54	InnoDB	latin1_swedish_ci	16.0 KiB	-
hazarddetails		41	InnoDB	utf8mb4_general_ci	16.0 KiB	-
hazardname		26	InnoDB	latin1_swedish_ci	16.0 KiB	-
likelihood		5	InnoDB	latin1_swedish_ci	16.0 KiB	-
mapping		31	InnoDB	latin1_swedish_ci	16.0 KiB	-
tbl_company		43	InnoDB	latin1_swedish_ci	16.0 KiB	-
tbl_company_infra		29	InnoDB	utf8mb4_general_ci	16.0 KiB	-
tbl_company_job		0	InnoDB	utf8mb4_general_ci	16.0 KiB	-
tbl_company_location		401	InnoDB	utf8mb4_general_ci	16.0 KiB	-
tbl_company_machine		155	InnoDB	latin1_swedish_ci	16.0 KiB	-
tbl_company_material		8	InnoDB	latin1_swedish_ci	16.0 KiB	-
tbl_company_process		645	InnoDB	latin1_swedish_ci	48.0 KiB	-
tbl_company_warehouse		30	InnoDB	latin1_swedish_ci	16.0 KiB	-
tbl_factor		37	InnoDB	latin1_swedish_ci	16.0 KiB	-
tbl_hazardjob		274	InnoDB	utf8mb4_general_ci	16.0 KiB	-

Server: 127.0.0.1 » Database: hirarc_db

Structure SQL Search Query Export Import Operations Routines Events Triggers Designer

tbl_hazardlisting		691	InnoDB	latin1_swedish_ci	400.0 KiB	-
tbl_hazardmachine		175	InnoDB	latin1_swedish_ci	16.0 KiB	-
tbl_hazardmaterial		243	InnoDB	latin1_swedish_ci	16.0 KiB	-
tbl_hazardprocess		337	InnoDB	latin1_swedish_ci	16.0 KiB	-
tbl_hazardrisk		304	InnoDB	utf8mb4_general_ci	16.0 KiB	-
tbl_hazardtype		7	InnoDB	latin1_swedish_ci	16.0 KiB	-
tbl_infra		55	InnoDB	utf8mb4_general_ci	48.0 KiB	-
tbl_injury		16	InnoDB	utf8mb4_general_ci	16.0 KiB	-
tbl_job		38	InnoDB	latin1_swedish_ci	16.0 KiB	-
tbl_jobhazard		343	InnoDB	utf8mb4_general_ci	112.0 KiB	-
tbl_location		194	InnoDB	latin1_swedish_ci	16.0 KiB	-
tbl_machine		149	InnoDB	latin1_swedish_ci	64.0 KiB	-
tbl_material		202	InnoDB	latin1_swedish_ci	64.0 KiB	-
tbl_occupationaldeseas		13	InnoDB	latin1_swedish_ci	16.0 KiB	-
tbl_ppe		26	InnoDB	latin1_swedish_ci	16.0 KiB	-
tbl_process		164	InnoDB	latin1_swedish_ci	80.0 KiB	-
tbl_riskcontrol		548	InnoDB	latin1_swedish_ci	144.0 KiB	-
tbl_risktype		5	InnoDB	latin1_swedish_ci	16.0 KiB	-
tbl_sector		6	InnoDB	latin1_swedish_ci	16.0 KiB	-
tbl_warehouse		57	InnoDB	latin1_swedish_ci	32.0 KiB	-
users		49	InnoDB	latin1_swedish_ci	16.0 KiB	-



Hazard Web Database

https://hirarc.sirimir.my/public/home

Sign in

Raja Zurina Binti Raja Mohamed Ali

- Dashboard
- Company Profile
- Occupational Safety
- Occupational Health
- My Page

Metric	Value
Total Hazard	691
Total Process	164
Total Machine	149
Total Material	202
Risk Control	548
Hazard Warehouse	57

https://hirarc.sirimir.my/public/admin

Sign in

Rafidah Ali

- Dashboard
- Admin Setting

Metric	Value
Total Hazard	691
Total Process	164
Total Machine	149
Total Material	202
Risk Control	548
Hazard Warehouse	57



https://hirarc.sirimir.my/public/processview

Dashboard Admin Setting

Parameter :: Process

Process Listing

Show 10 entries [Add New Process](#)

Previous 1 2 3 4 5 ... 17 Next

Search:

No	Process	Sector	Remark	View Hazard	Action
1	Baking	1. Food & Beverage	Baking is a method of preparing food that uses dry heat, typically in an oven, but can also be done in hot ashes, or on hot stones. Please refer to Oven Hazards for more related hazards		
2	Cooking	1. Food & Beverage	Cooking process in manufacturing involves process of heating raw materials in cooker Please also refer to Cooker Hazards for more related hazards		
3	Cooling	1. Food & Beverage	Process cooling can be defined as the removal of unwanted heat from a process		
4	Cutting	1. Food & Beverage	Cutting involves use of sharp equipment such as knives to raw materials. It is used to break down large pieces of food into smaller pieces suitable for further processing, such as in the preparation of meat		
5	Proofing	1. Food & Beverage	Proofing (also called proving) is a step in the preparation of yeast bread and other baked goods in which the dough is allowed to rest and rise a final time before baking. During this rest period, yeast ferments the dough and produces gases, thereby leavening the dough.		
6	Mixing	1. Food & Beverage	Mixing is the combining of two or more materials to achieve a desired level of uniformity		
7	Measuring	1. Food & Beverage	Measuring is the process in materials preparation to ensure correct weight and other relevant parameters. Hazards related to measuring process shall also depends on hazards related to the		

Hazard Web Database

https://hirarc.sirimir.my/public/hazardview

Dashboard Admin Setting

Hazard Database

[Add New Hazard](#)

Show 10 entries

Previous 1 2 3 4 5 ... 70 Next

Search:

No	Hazard	Type	Consequences	Remarks	Reference	Risk Control	Edit
376	Worn out parts and materials in boilers	Physical	Increased risks of injuries and burns/scalding	Worn-out seals or gaskets can lead to steam leaks, which can cause burns, scalding, or other injuries to personnel working in the vicinity of the boiler.	INDUSTRIAL ACTIVITIES BRANCH Occupational Safety and Health in the Food and Drink Industries by Sbizue Tomod, International Labour Office		
43	Workplace violence	Psychosocial,Work organisation	Increased risks of Occupational Psychiatric Disorders such as Work-related stress, anxiety disorders and depression	Workplace violence and aggression is when a person is abused, threatened or assaulted at the workplace or while they are working. It can cause both physical and psychological harm, making it a risk to health and safety.	Safework Australia website OSHA Website: Workplace Violence		
454	Working in awkward position/posture	Ergonomics	Increased risks of MSD	Working in awkward postures below knee height and above shoulder height can lead to musculoskeletal			



Hazard Web Database

Hazard Database (Psychosocial)

Database :: Hazard for Warehouse

Listing : Hazard For Warehouse

https://hirarc.sirimir.my/public/processcompany

Dashboard Company Profile Occupational Safety Occupational Health My Page

MY HAZARD LISTING : PROCESS

Company Name : Raja Zurina Enterprise

Hazard	Type	Consequences	Remark	Risk Control	Reference	Action
PROCESS NAME: ASSEMBLY						
Lack of safety motivation	Psychosocial, Work organisation	Safety motivation is a hyperactive energy boost to employees for working safely in the workforce. Motivating the employee to be safe might be difficult but employers need to promote safety motivation by doing innovating, trying new things and taking risks.		Make safety an important part of your organizations culture employees should feel ownership in the safety process	Staff Management Website	■
Working with sharp knives/tools	Physical	Increased risk of injury such as cuts through accidental slips or mishandling			CDC website	■
Spills on floors	Physical	Increased risk of trippings, causing injuries such as such as sprains,			NIOSH CDC Website on Slips and Falls	■

Dashboard Admin Setting

Risk Control Database

Risk Control Listing

Show 10 entries [Add New Risk Control](#)

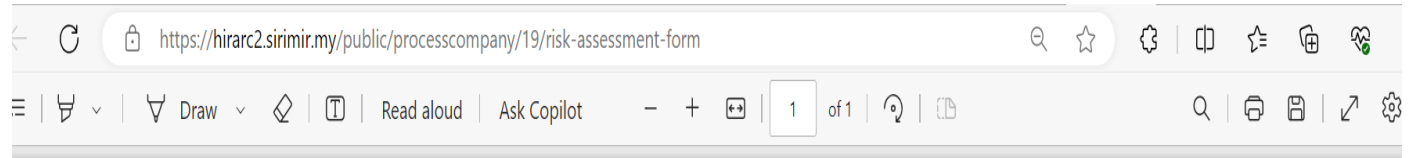
Previous 1 2 3 4 5 ... 55 Next

Search:

No	Risk Control	Type	Remarks	Description	Reference	Edit
1	Working on to ground level to eliminate the need to work at height	Elimination			risk control - wikipedia	Edit
2	Replacing lead - based paint with titanium white.	Substitution		To be an effective control, the new product must not produce unintended consequences. Because airborne dust can be hazardous	risk control - wikipedia	Edit
3	Enclosure and isolation creates a physical barrier between personnel and hazards, such as using remotely controlled equipment.	Engineering			risk control - wikipedia	Edit
	Fume hoods can remove airborne contaminants	Engineering			risk control - wikipedia	Edit
	Encure trainings are given to employees	Administrative		Provide workers with training s	risk control - wikipedia	Edit

Hazard Web Database

Hazard	Type	Disease	Remark	Risk Control	Reference	Action
MACHINE NAME: AUTOMATIC OPTICAL INSPECTION						
Exposure to vibration from machines on shop floor	Physical	Occupational Musculoskeletal Disorders	Increased risks to Musculoskeletal disorders, Blood vessel damage, Nerve damage and Inner ear damage	If you are exposed to vibration on a regular basis, it is important to take steps to protect yourself. Some ways to do this include: Wearing vibration-dampening gloves Using a vibrating platform during breaks Taking regular breaks from exposure to vibration	CCOHS: Vibration - Health Effects	✓
Use of machines with rotating part.	Physical		Increased risks of entanglement between the parts		DOSH Data	✓
MACHINE NAME: AUTOMATIC OPTICAL INSPECTION						
Exposure to vibration from machines on shop floor	Physical	Occupational Musculoskeletal Disorders	Increased risks to Musculoskeletal disorders, Blood vessel damage, Nerve damage and Inner ear damage	If you are exposed to vibration on a regular basis, it is important to take steps to protect yourself. Some ways to do this include: Wearing vibration-dampening gloves Using a vibrating platform during breaks Taking regular breaks from exposure to vibration	CCOHS: Vibration - Health Effects	✓
Use of machines with rotating part.	Physical		Increased risks of entanglement between the parts		DOSH Data	✓
MACHINE NAME: DIE ATTACH						
Use of machines with rotating part.	Physical		Customized	Customized	DOSH Data	✓
Use of machine with moving sharp-edged	Physical		Customized	Customized	DOSH Data	✓



Department / Bahagian		Penaksir Risiko		Dituluskan Oleh													
Proses		Assembly		Tandatangan													
Lokasi		Ahli RM 2		Nama													
Tarikh Penaksiran / Tarikh Kajian semula*		Ahli RM 3		Jawatan													
Tarikh penaksiran akhir		Ahli RM 4		Tarikh													
No.	PENGenalPASTIAN HAZARD					PENILAIN RISIKO				KAWALAN RISIKO	PENILAIAN RISIKO SEMULA				Kenyataan		
	Aktiviti Kerja	Hazard	Klasifikasi Hazard				Peristiwa dan akibat	Kawalan risiko sedia ada (jika ada)	Justifikasi kemungkinan	Kemungkinan (L)	Keterukan (S)	RMN	Kawalan risiko tambahan	Kemungkinan (L)		Keterukan (S)	RMN
		Fizikal	Kimia	Biologi	Ergonomik	Psychosocial											
1	Please edit activity 1	Working with sharp knives/tools	✓				Increased risk of injury such as cuts through accidental slips or mishandling										
2	New activity 1	Spills on floors	✓				Increased risk of trippings, causing injuries such as such as sprains, fractures, or head injuries										
3																	
4																	
5																	



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THANK YOU