

# Sharing on WSH Incidents in T&S Sector



MINISTRY OF  
MANPOWER

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A Great Workforce A Great Workplace

# Scope



WSH Statistics



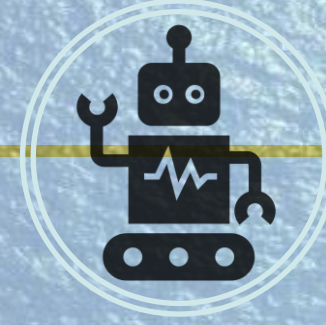
Common  
Contraventions



Case Studies



Lesson Learnt

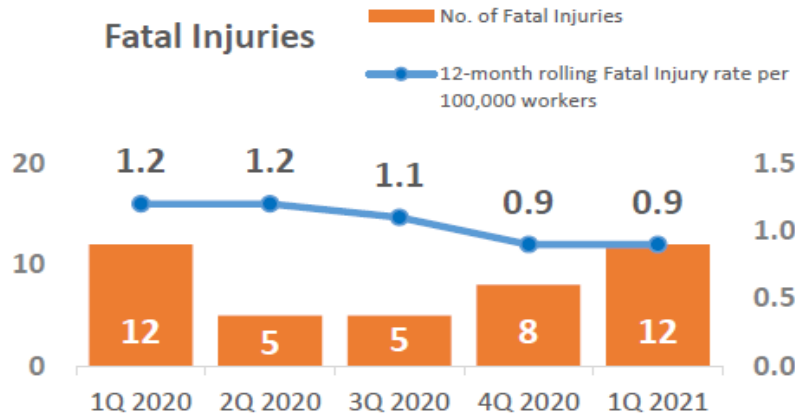


Future

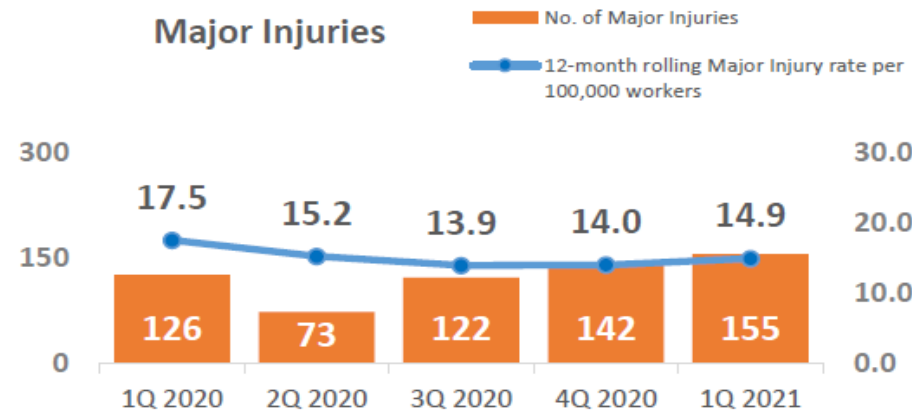


# National WSH Statistic for 1Q 2021

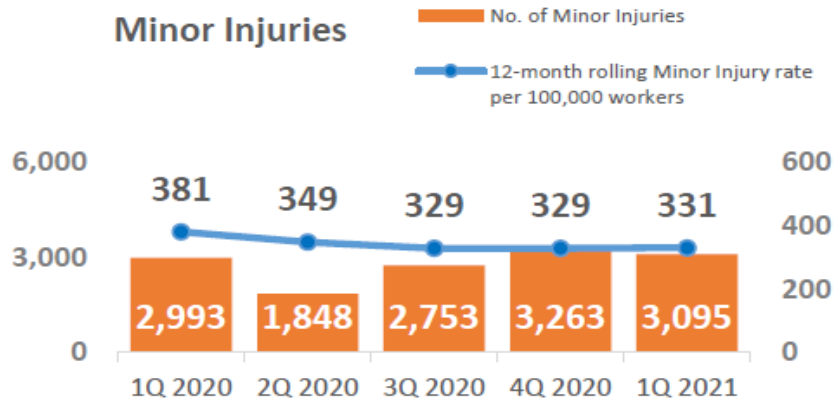
## Fatal Injuries



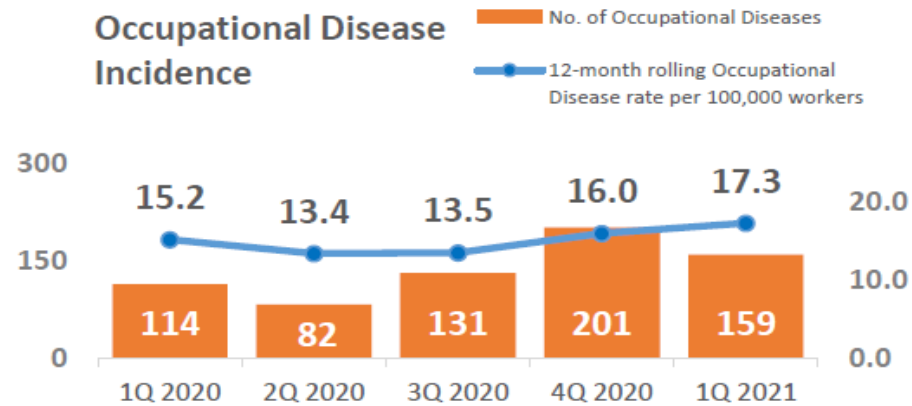
## Major Injuries



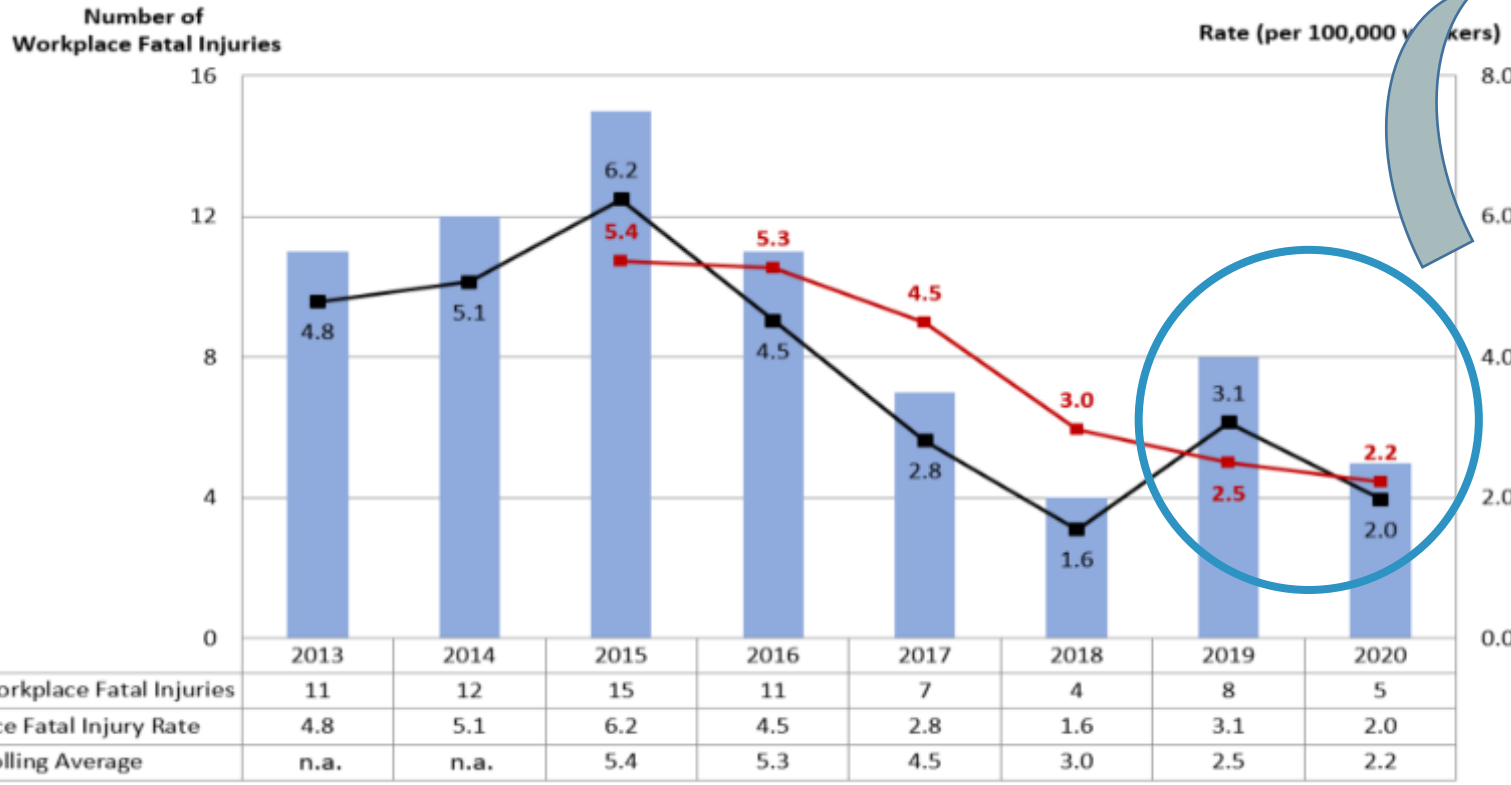
## Minor Injuries



## Occupational Disease Incidence



# Workplace Fatalities in T&S



Better WSH performance or due to Covid-19?

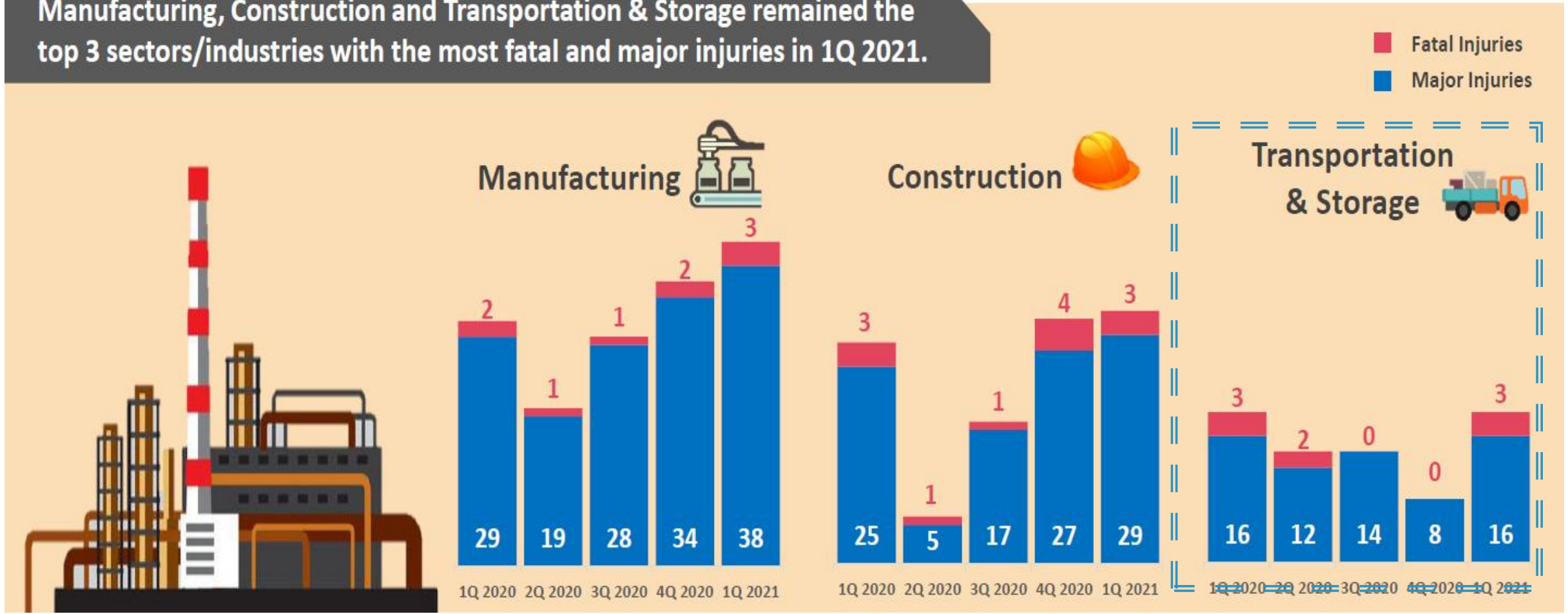


- Saw 5 fatalities in 2020, with an average of 5 fatalities for past 3 years
- Spike in fatalities of 8 in 2019 (pre-Covid) resulting in increase of workplace fatal injury rate of 3.1



# T&S Statistics in Q1 2021

Manufacturing, Construction and Transportation & Storage remained the top 3 sectors/industries with the most fatal and major injuries in 1Q 2021.



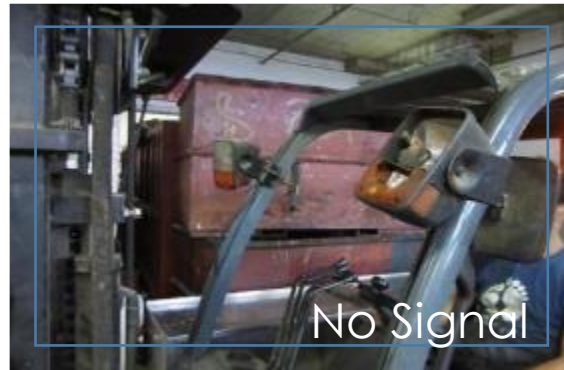
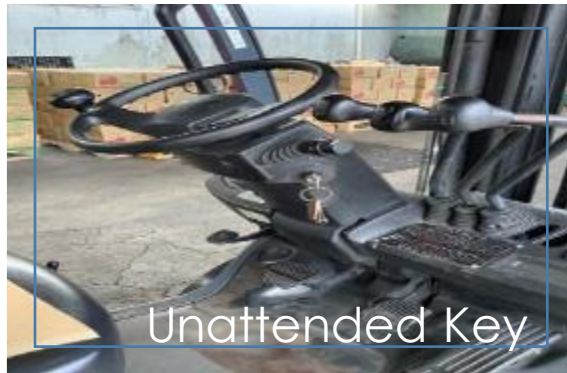
# T&S Fatalities by Incident Type

Incident Type	Year				
	2016	2017	2018	2019	2020
Caught in between object	3	4	1	0	1
Struck by falling object	2	2	0	0	1
Traffic accident	3	3	0	0	2
Struck by moving object	<b>4</b>	<b>0</b>	<b>1</b>	<b>4</b>	<b>1</b>
Fall from height	2	2	0	1	0
Collapse/Failure of Structure & Equipment	0	0	1	1	0
Drowning	1	0	0	2	0
Slips trip & Falls	0	2	1	0	0
Crane-related	2	0	0	0	0

# Common Contraventions in T&S

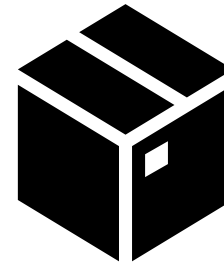
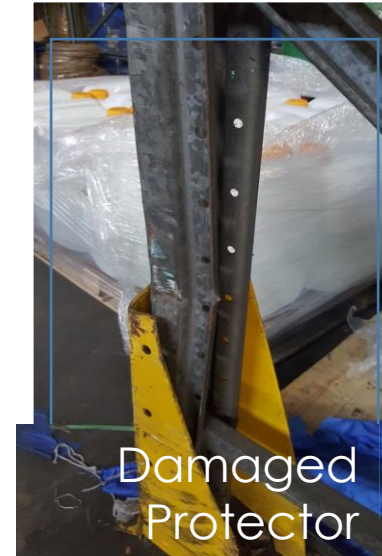


# Forklifts

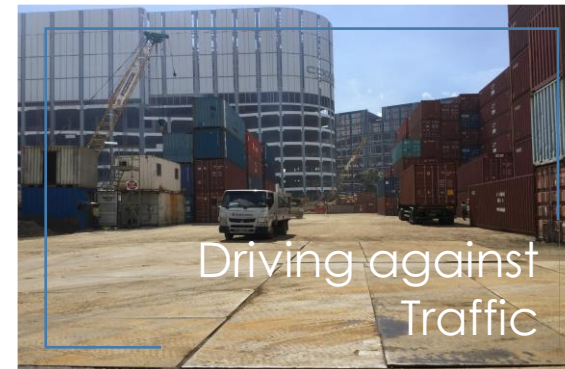
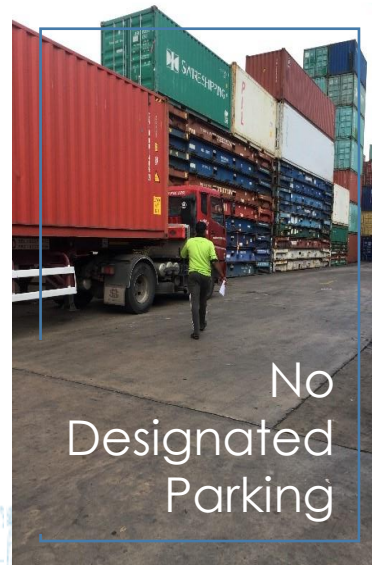
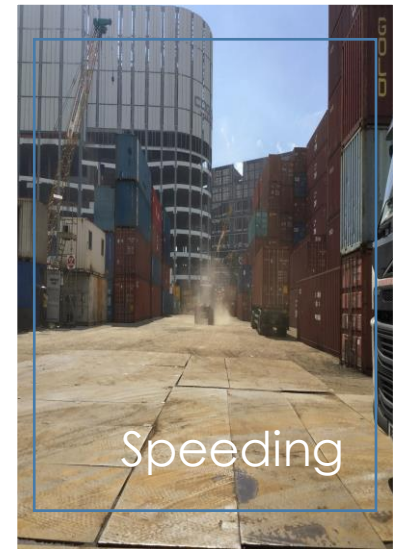
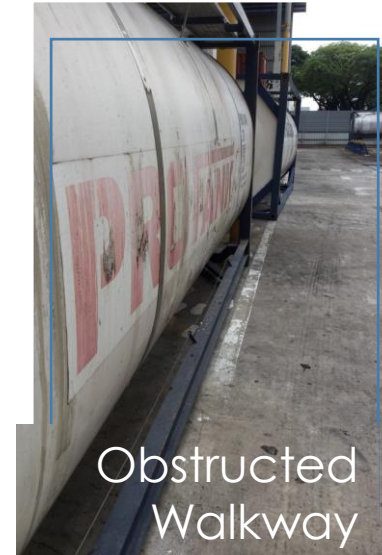




# Storage



# Traffic Management





# Case Studies



# Case Study 1 : Brief Facts

- The Deceased and his supervisor were instructed to retrieve electronic items which were placed on cargo racks within the warehouse.
- After discussion, a decision was made where the Deceased would stand on the empty pallets that were placed on the forks of a reach truck, while the supervisor would elevate him using the reach truck to retrieve the various loose electronic items from the cargo rack.
- The Deceased was lifted to the third tier and subsequently to the second tier of the cargo rack.
- After retrieving the items on the second tier, the supervisor concurrently retracted the forks' mast and reversed the reach truck.
- The Deceased then fell backwards and off the wooden pallets, landing head first onto the ground.



# Case Study 1 : Findings

- Failure to ensure that a Risk Assessment and Safe work Procedures were established in respect of the retrieval works for loose items from storage racks.
- The RA only covered the risks relating to the machine's movement, collision with persons, toppling of forklift and falling objects.
- Failure to adhere to company's safety policy, workplace safety and health management system and in-house rules and regulations to not use the reach truck as a vertical access for personnel and should not be used to carry passengers.
- Failure to ensure that employees practiced a safe working culture. Unsafe practices existed in the warehouse and were captured by the CCTV.

Photos



# Case Study 2 : Brief Facts

- Accident happened in the morning shift which involved a team of night shift packers comprised one Supervisor and 3 other workers;
- The team had completed picking and packing work, and was clearing and returning the pallets of goods to the Automated Storage and Retrieval System (“ASRS”) for storage.
- The forklift operator was driving a forklift to retrieve the pallet to return to the ASRS for storage.
- At the same time, IW was walking across the staging area while carrying a stack of four empty cartons which blocked his line of sight.
- The forklift operator reversed the forklift and struck the IW who was walking behind him.

Video to be embedded

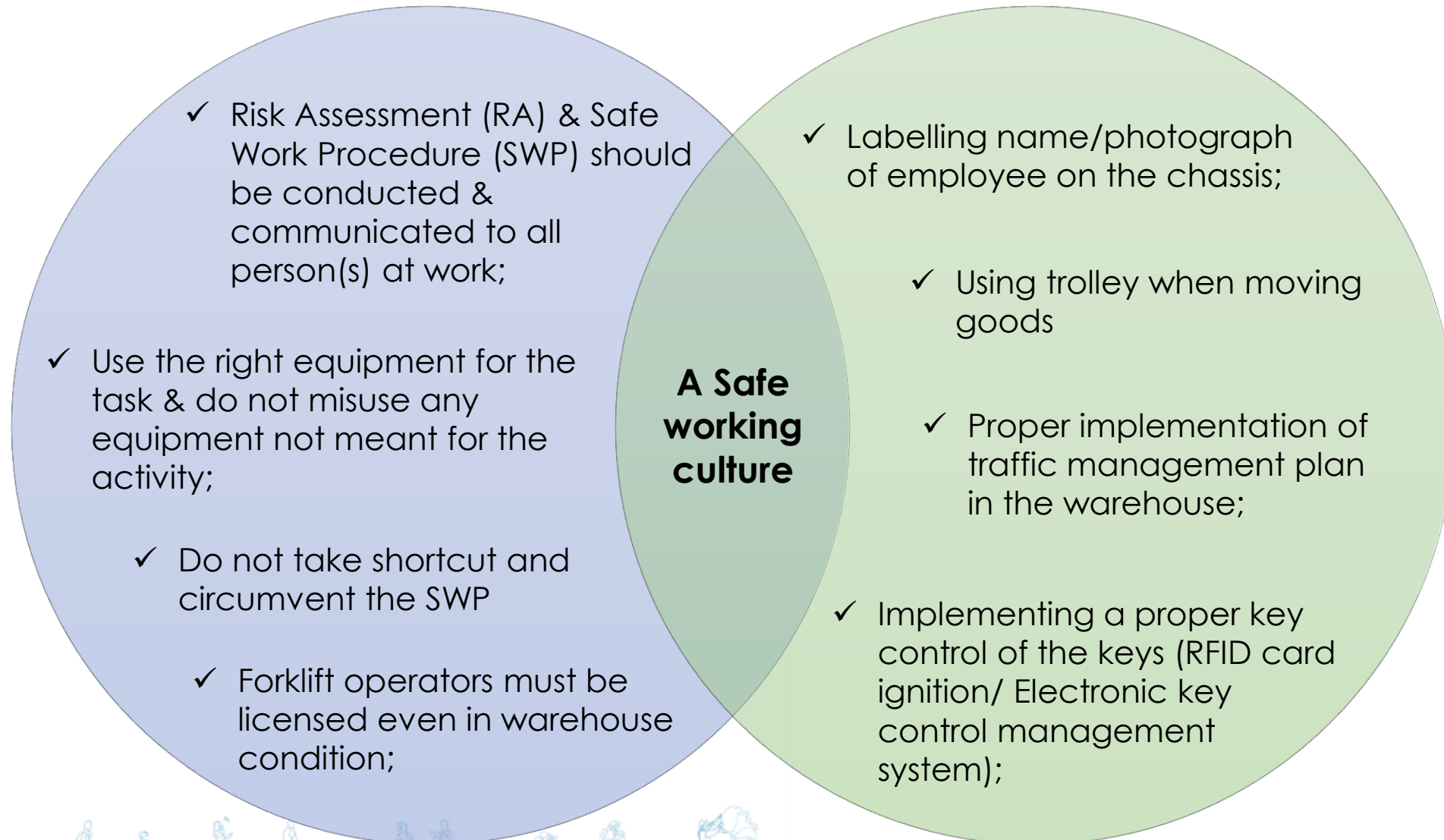


# Case Study 2 : Findings

- Forklift operator was operating the forklift without a valid forklift license;
- Warehouse supervisor was aware that the operator had operated the forklift without a valid license;
- Multiple untrained/unlicensed workers have operated the forklift in the warehouse;
- Ignition key to the forklift was not properly controlled, which allowed the keys to be passed around;
- Poor implementation of traffic management plan in the warehouse;
- Lack of situation awareness of the surrounding work activities.



# Lesson Learnt from Case Studies





# Future of T&S Sector



## Data Analytics

- Data Analytics using CCTV and data loggers to curb unsafe human behavior



## Technology

- Automated Guided Vehicles (AGV)
- Offsite Cranes
- Automated Storage and Retrieval System ("ASRS")



## Safer equipment

- RFID/ Biometric Technology for key press and machine operation
- Use of sensor, alarm and cameras



## Upskilling

- Greater upskilling of manual employees
- Sector and companies gaining WSH maturity in near future

# Forklift Resources – NEW!

Scan the QR codes to download & print these resources from the WSH Council website.

Visit <https://www.tal.sg/wshc/Events/Forum/2021/SLA-webinar-on-keeping-our-workplace-safe-and-accident-free> for other vehicular-related safety collaterals that you can share with your workers.

## (i) Forklift Pictogram Poster



## (ii) Forklift Sticker:

Also available in Tamil, Chinese, Hindi & Bengali



# Thank you

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