

Turning Insight into Impact: Using Data to Improve Safety

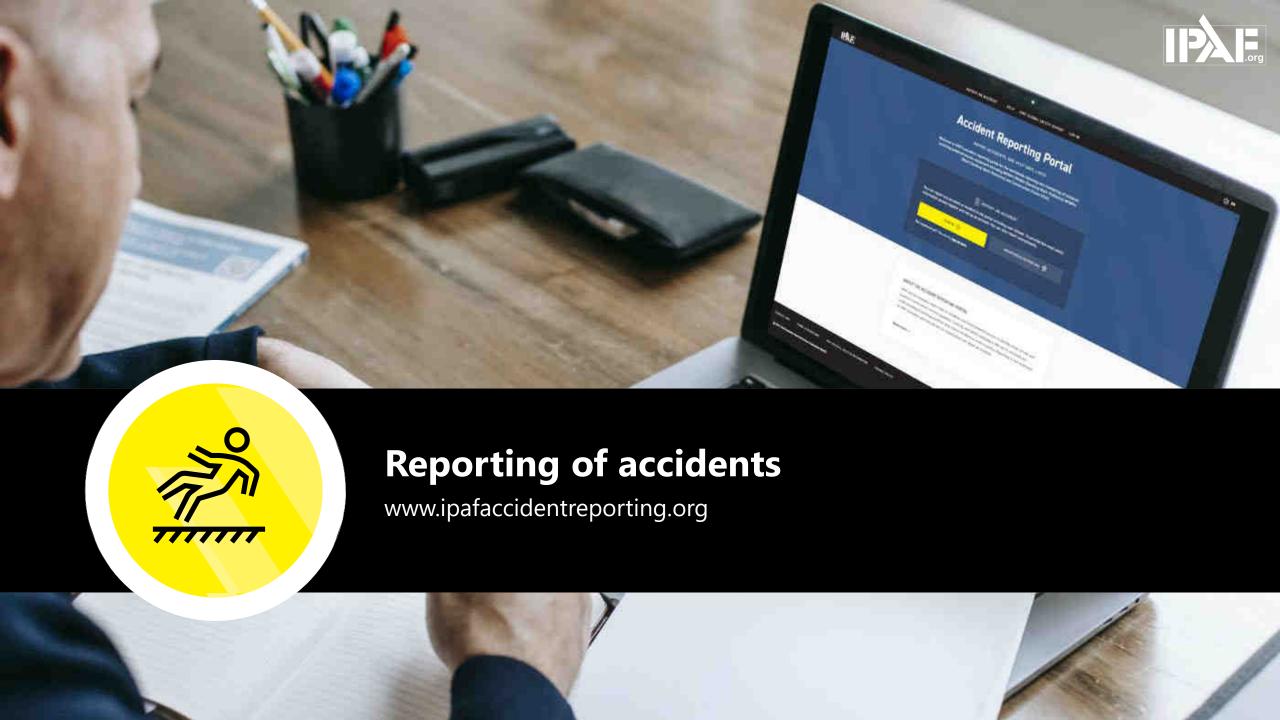
Brian Parker – Head of Safety & Technical, IPAF.







Promote and enable the safe, effective use of powered access worldwide



Unsafe operation – lucky today...but safety shouldn't depend on luck.







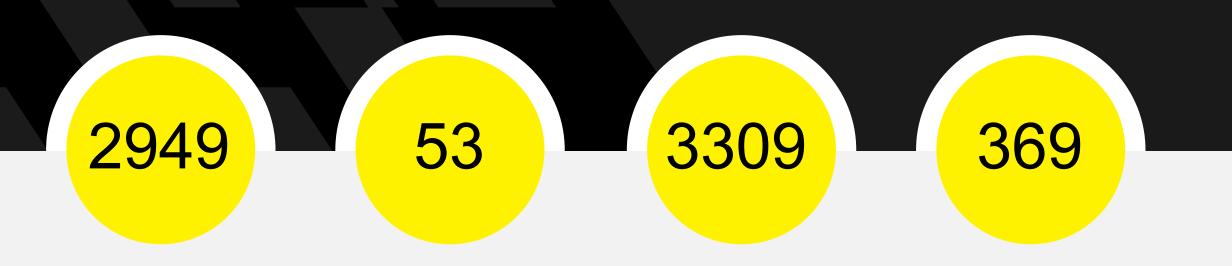




Gathering data

The Ducker & Carlisle report.

Global accident data: Fatal and major (2022-2024)



Total Re	ports
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Countries

Persons Involved

Fatalities

 82 Falls from the property 	olatform
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- 64 Electrocutions
- 46 Entrapments
- 50 Overturns
- 22 Hit by falling object

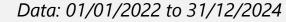
(30 major)

(6 major)

(15 major)

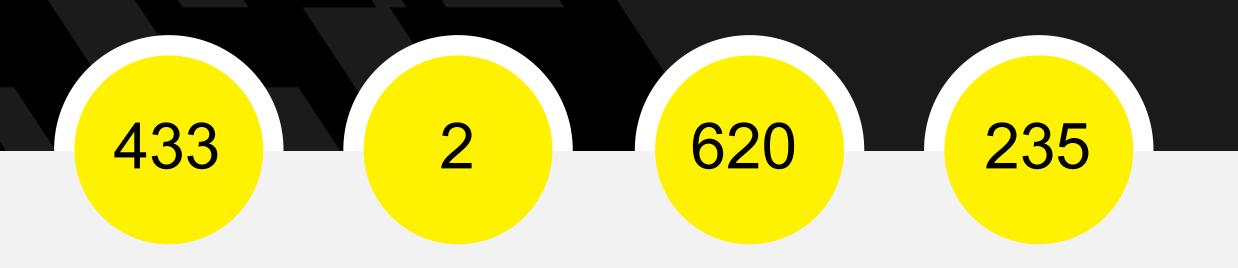
(41major)

(28 major)





US and Canada accident data: Fatal and major (2022-2024)



Countries

Persons Involved

Fatalities

- 53 Electrocutions
- 14 Entrapment
- 31 Overturns
- 18 Hit by falling object

(13 major)

(3 major)

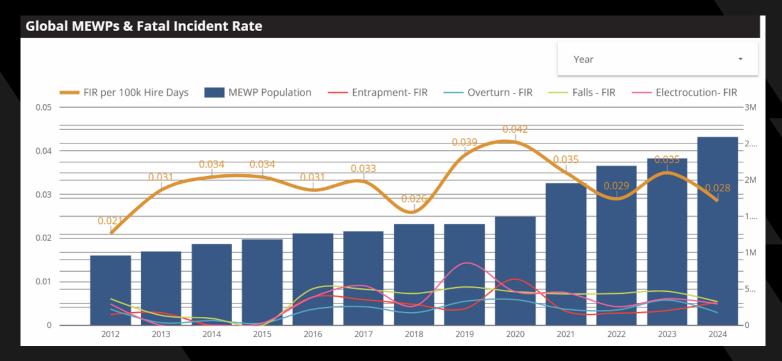
(3 major)

(21 major)

(10 major)



Global fatal incident rate (FIR) 2020-2024



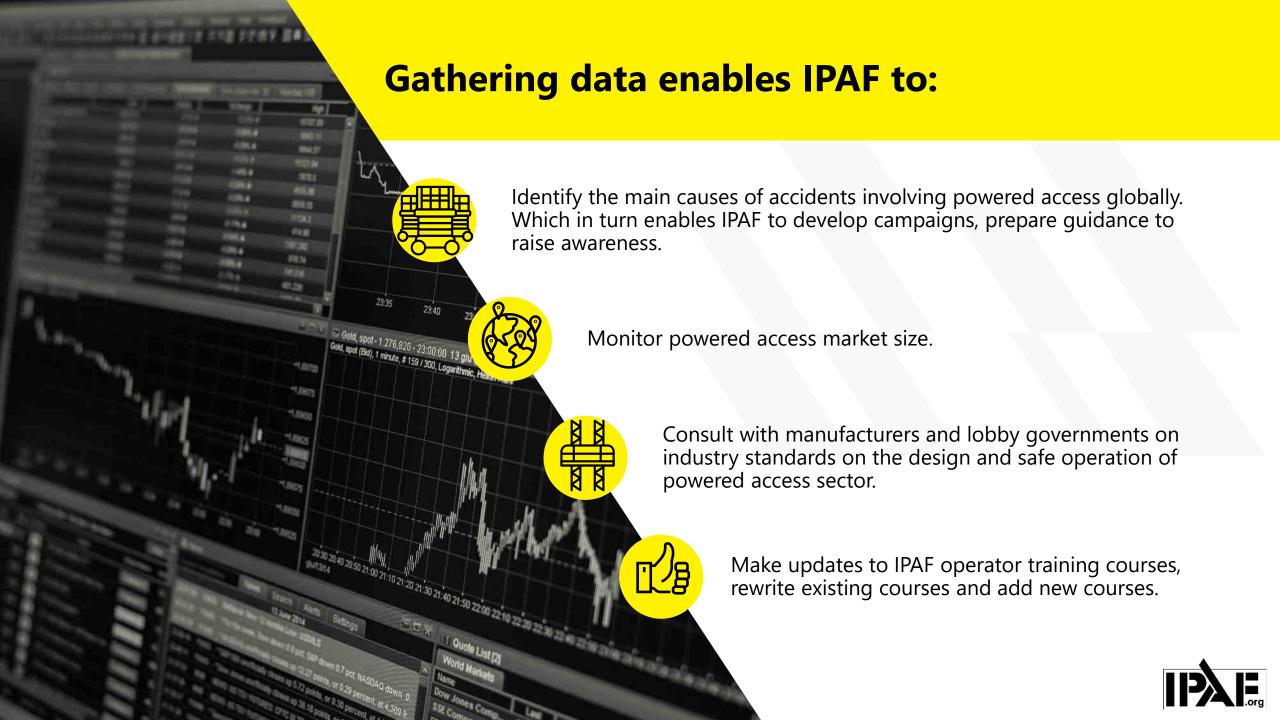


FIR: All main classifications below 0.01 in the last 4 years:

- Falls from Platform
- Electrocutions
- Entrapments
- Overturns
- Global FIR 0.028
- Global Fleet Utilisation at 64%*
- Global FIR per 100,000 Hire days



^{*}Fleet source- Ducker & Carlisle



IPAF Safety Campaigns: Global Fatal Statistics (2021-2024)



Falls from the Platform

Campaign launched 2022

2,920 views of campaign in 80 countries since 2023

High Voltage!

Campaign launched 2023

9,968 views of campaign in *128* countries since 2023

Crushing can Kill!

Campaign launched 2024

19,600+ views of campaign in 118 countries

Stop Overturns!

Campaign launched 2025

8137+ views of campaign in 99 countries



MEWP manufacturer safety innovations



Intelligent harness anchorage systems

Fully electric (lithium powered)





Secondary guarding

Remote access technologies (telematics), preventing unauthorised and misuse





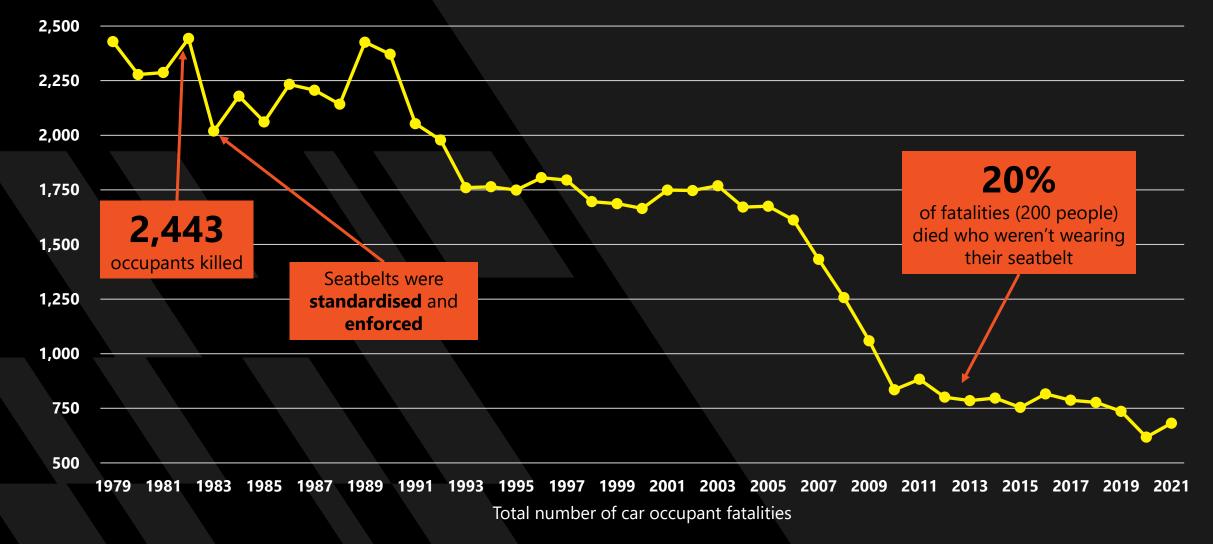
Outreach limitation and overload system improvements





Data does innovate!

UK seatbelt introduction



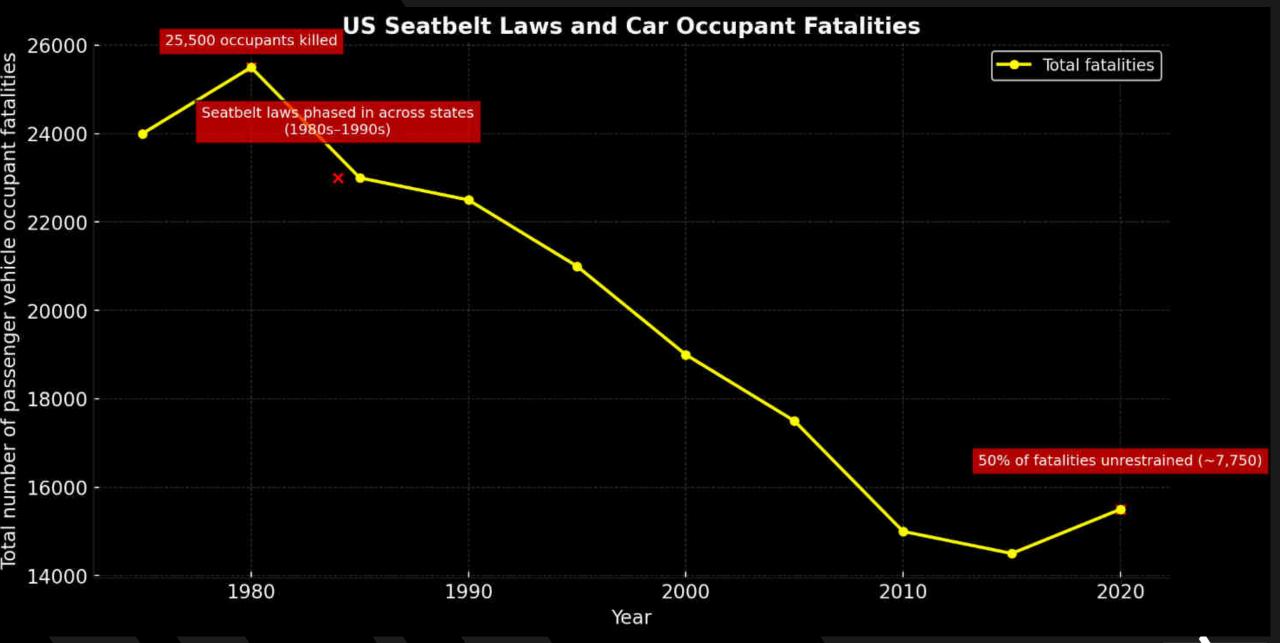


1959: First three-point belt designed by Volvo



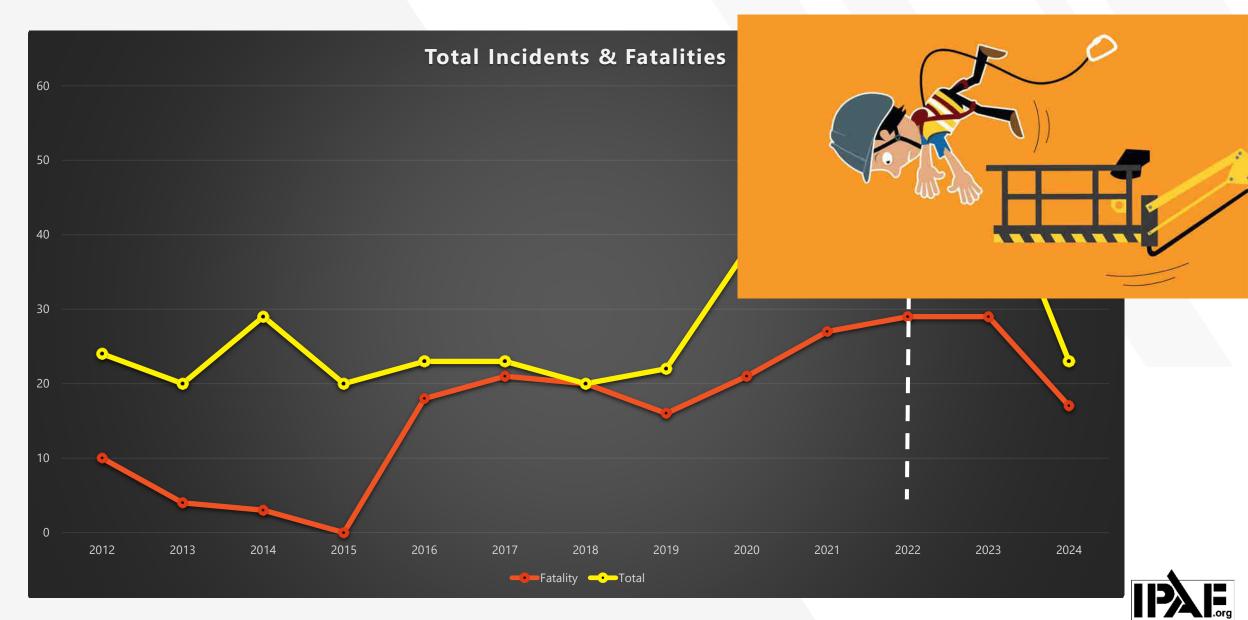






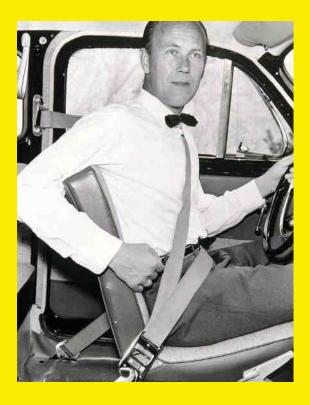


Falls from the platform campaign: Don't fall for it!



Incidents lead to action, the danger is not knowing about them

Volvo's three-point seatbelt



IPAF's recommendations for harness in boom-type MEWPs

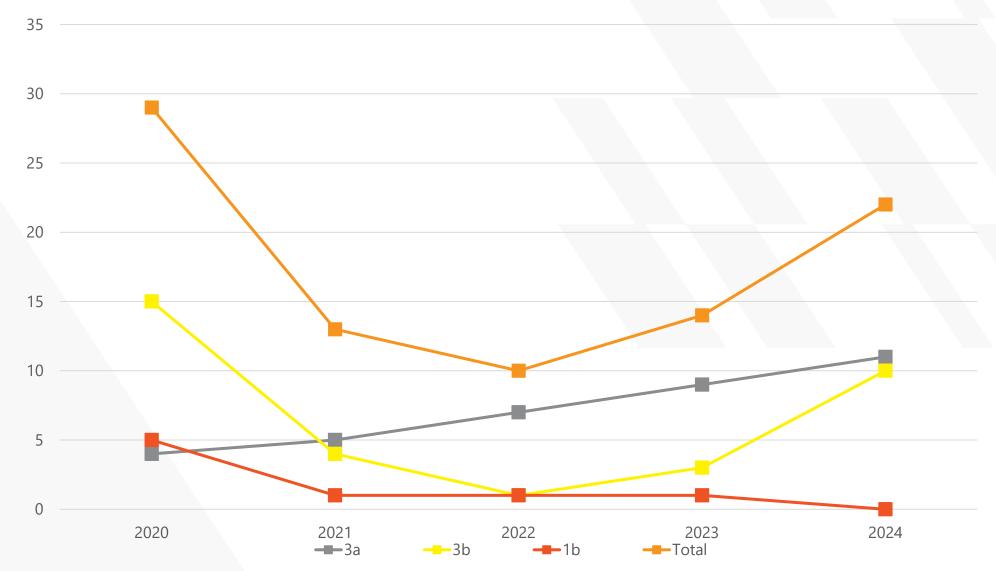


Intelligent harness anchorage points





MEWP global entrapment fatal data for last 5 years









Turning data into action for the user

IPAF Accident Reporting Portal Dashboard

Six configurable filters

- → Outcome
- → Classification
- → Machine configuration
- → Location
- → Injury
- → Body part injured



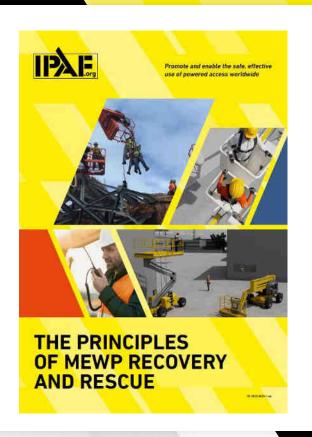
Example shown of US vs All IPAF reports



Bringing realism to IPAF training courses

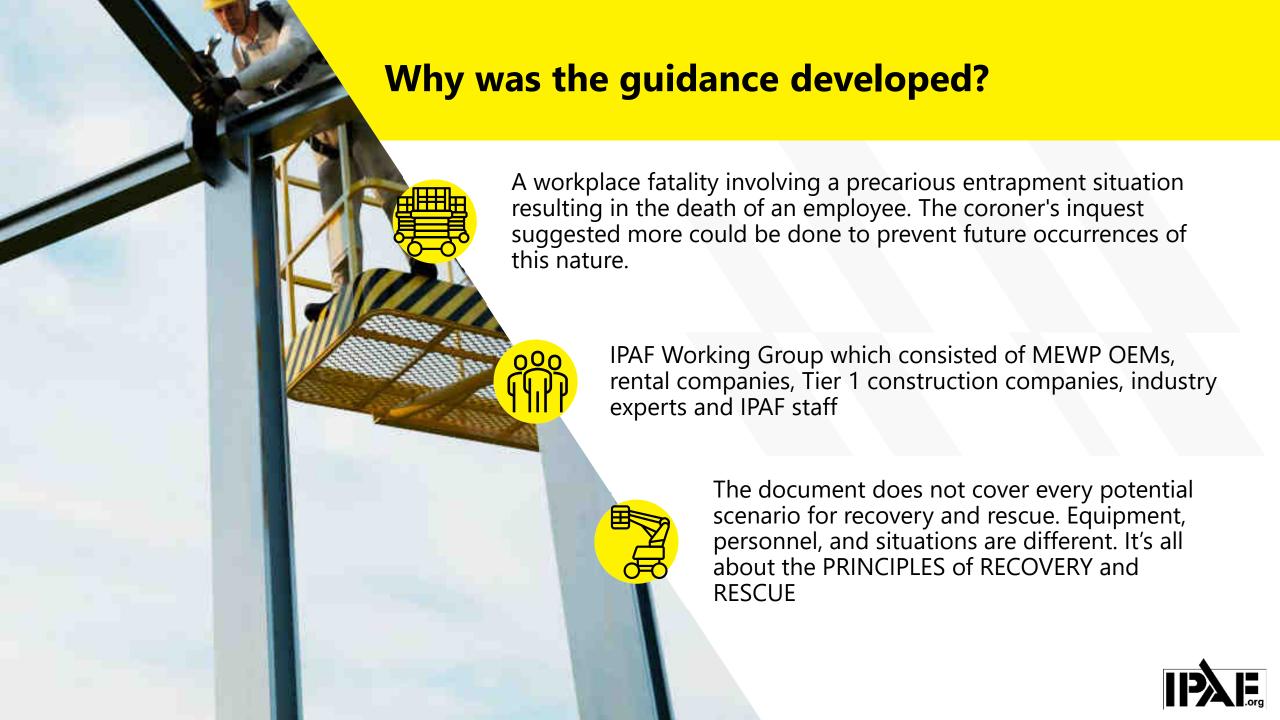






The Principles of MEWP Recovery and Rescue

NEW IPAF GUIDANCE







New terminology "Recovery & Rescue"

New terminology

Recovery can be defined as the retrieval/lowering of a platform from the elevated position to the transport/stowed position, or a place of safety with or without personnel in the platform.

The lowering of the platform is carried out by using the ground controls, or if they are inoperative, the emergency/auxiliary lowering system.

Examples of when recovery is required:

- Medical incident or emergency
- MEWP malfunction
- Load sensing system has activated meaning the platform controls are inoperative
- Entrapment of an operator
- A platform occupant suspended in a safety harness
- Operator error

Recovery





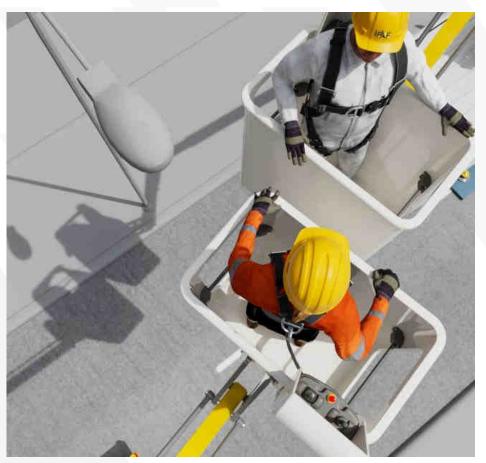
New terminology

Rescue is when a MEWP platform is unable to be lowered, and the **platform occupants require rescuing by platform-to-platform, or other method.**

This can be due to:

- Inoperative ground and platform primary controls
- Inoperative emergency lowering controls
- Entanglement
- MEWP becoming unstable and is at risk of overturn
- A technical fault with a platform levelling system

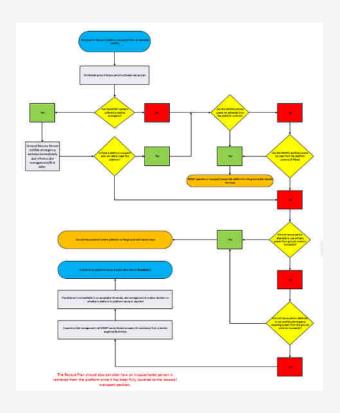
Rescue



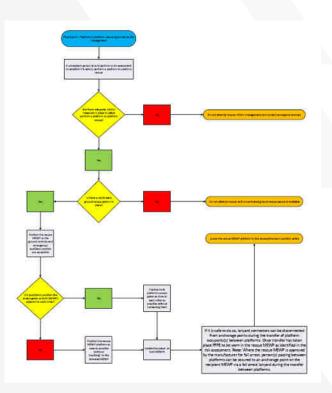


What's new? - New flowcharts

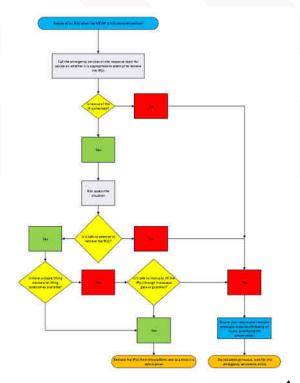
Ground controls



Platform-to-platform method



Retrieval of an injured person in the stowed position





What's new - MEWP recovery / rescue plan template

MEWP recovery / rescue plan template

- MEWP details manufacturer, model and identification number (if applicable)
- Nominated Ground Rescue Person(s) name and contact details
- · Communication method, i.e., two-way radio, mobile phone, hand signals, etc.
- Contact details and location of the owner of the MEWP and/or rental company service engineer/technician
- · Site address and location
- Date and duration of rescue plan: From / / / to / / /

Situation	Proposed Action
Failure of platform primary controls in the	Where the normal primary power has failed at
elevated position	the platform controls, the MEWP operator will
	use the platform auxiliary controls (if fitted) to
	lower the platform to ground, or a place of
	safety
Failure of the operator to be able to operate the	Where the operator is incapable of lowering
MEWP while elevated due to one of the following	the raised platform using the platform
reasons:	controls, the ground rescue person who has
A. Operator incapacitated	been familiarised with the ground controls
B. Auxiliary functions fail to operate from the	and auxiliary/emergency lowering procedures
platform controls	will lower the platform safely using the
	primary power at the ground controls
Failure of primary power at the ground controls	Where the ground control primary power has
	failed, the ground rescue person will use the
	auxiliary/emergency lowering system at the
	base of the MEWP to lower the platform
Failure of ALL normal and auxiliary lowering	Where all primary power and
functions	auxiliary/emergency lowering systems have
	failed, the ground rescue person should
	report the issue immediately to their
	supervisor
Supervisor duties	The supervisor should contact the
	owner/rental company for assistance of a
	service engineer/technician to attend site.
	If assistance is not available in an acceptable
	timescale, they should report the issue to the
	site management
Site management duties	Site management to decide on whether a
	platform-to-platform rescue is required for
	the platform occupant(s)

Defined responsibilities and principal duties for key duty holders

It is the responsibility of everyone listed above to ensure they understand the procedures to follow in the rescue plan in case of an emergency.

Note: The MEWP operator should not commence work until there is a suitable rescue plan in place and a ground rescue person.

No matter the duration of work, it is important to ensure that there are clear lines of responsibility set out when planning and performing work at height tasks when using a MEWP. The table below identifies the responsibilities and principal duties of the four key stakeholders.

Table 1- Key duty holders, their responsibilities and principal duties.

Duty holder	Responsibility	Principal duties
User (contractor/employer)	Organise and manage the task to ensure it is performed safely	Determine the work at height task and means of access
		Management and supervision of the work at height task
		MEWP selection
		Trained in the safe use of MEWPs
		Ensure MEWP operators are trained and familiarised
		The development of suitable and sufficient risk assessments and rescue plans to develop SSoW*
		Be able to safely lower a MEWP platform in the event of an emergency
		Correct PPE and PFPE is worn by site personnel
		Provide clear instructions
Operator	Complete the task in a safe manner	Understand the risks with the task to be performed
		Understand and follow preventative measures in place i.e. SSoW*
		Use the correct PPE and PFPE as instructed
	Training	Be trained and familiarised with the specific MEWP they are required to operate
		Complete pre-use inspections
	Communication	Ensure there is a communication method with the ground rescue person
		Have the authority not to commence work unless there is a rescue plan and a ground rescue person in place

Ground rescue personnel	Conduct rescue from the ground controls or emergency lowering/auxiliary system in a safe manner	Supervise the MEWP operator while working at height
	Training	It is preferable that the ground rescue person has undergone some form of formal training relevant to the task. However, all ground rescue persons should, as a minimum, be familiarised with the MEWP being used and the rescue procedures in place, so they are competent to lower the MEWP platform using the ground/emergency controls in the work situations to which they are exposed
		Have sufficient competency to safely lower the platform in the event of an emergency
	Communication	Have means of communication and raising the alarm with the MEWP operator and the response team
		Note: Some MEWPs with more complex emergency lowering systems may require two people to safely lower the platform
Response Team	Be available to conduct recovery and recue when the MEWP's ground controls and emergency lowering controls are inoperative or when there is a medical emergency with the MEWP operator	Be able to act to <u>an emergency situation</u> in a timely manner
		The response team are required to be trained MEWP operators as there may be a need to use another MEWP to perform a platform-to- platform rescue
	Communication	Have a suitable communication method such as a two-way radio







IPAF Safety Campaign for the USA.

How to Stay Safe on or Near Roadways.

The reason for the safety campaign



Although mobile elevating work platforms (MEWPs) remain one of the safest ways to access temporary work at height, IPAF's accident data shows increased reports from the USA of MEWPs being hit by vehicles and equipment.

Setting up MEWPs correctly when working on, or near roadways helps reduce incidents and accidents.









Who has jurisdiction in the USA?

If an employee suffers a major injury or fatality because of a road traffic accident (RTA) while operating a MEWP, e.g., the MEWP is hit by a passing vehicle, multiple investigations may take place.

Local police and possibly the Department of Transportation (DOT) would typically investigate the incident as an RTA, while the Occupational Health and Safety Administration (OSHA) would likely investigate from the workplace safety compliance perspective to determine whether any occupational safety standards were violated.













Thank you.