



LIGHTNING – HOW IT CAN AFFECT YOU, AND YOUR MEWP TOOLBOX TALK

WHAT IS THE RISK?

Mobile Elevating Work Platforms (MEWPs) should not be used if there is a risk of lightning. If lightning strikes a MEWP it will look for the path of least resistance to earth. This means it can travel from the platform, through the superstructure and tyres to earth. Rubber tyres do not insulate MEWPs.

HOW CAN LIGHTNING AFFECT PEOPLE?

Lightning can cause death or serious injury by:

- **A direct strike** – when a person is directly struck by lightning.
- **Contact voltage** – when a person is in direct contact with a conductor that has been struck by lightning.
- **Side flash** – when a person is struck by an arc or flash from a conductor carrying a lightning strike near the person.
- **Ground current** – injuries can occur when standing in the area of a lightning strike as the current can flow through the ground and enter and exit the body through the feet.

HOW CAN LIGHTNING AFFECT A MEWP?

The electrical current caused by a lightning strike on a MEWP can cause severe damage to the machine, there is a risk of:

- Fire and explosion;
- damage to the MEWP's electrical system such as computer control systems, wiring harnesses and display screens;
- damage to hydraulic hoses, which could be pressurised;
- damage to tyres;
- MEWP stability can be affected for machines fitted with stability systems such as jacks, outriggers or stabilisers.

WHO NEEDS TO KNOW?

This Toolbox Talk applies to all individuals involved with the operation of a MEWP, including:

- Users;
- operators;
- managers and supervisors.

WHAT ARE THE WARNING SIGNS OF A THUNDER STORM?

- Large, puffy cumulus clouds, especially ones which are building vertically;
- darkening sky and clouds;
- abrupt changes in wind direction;
- sudden changes in temperature;
- falling atmospheric pressure.

IF A MEWP HAS BEEN STRUCK BY LIGHTNING:

- Stay in the platform until the storm has passed.
- Never attempt to lower the platform from the ground controls as there is a risk of electrocution.
- Always wait until the storm has passed before attempting to lower the platform.
- MEWPs that have been struck by lightning must not be used until they have been inspected by an authorised person. Always isolate, tag and report.

WHAT TO DO IF SOMEONE HAS BEEN STRUCK BY LIGHTNING:

If a person is struck by lightning, call the emergency services immediately. It is likely that first aid will be required urgently and should be started without delay. There is no danger in touching a person who has been struck by lightning.

WHAT SHOULD I DO?

- Read and review your risk assessments for validity and relevancy to the task.
- If there is a risk of lightning, cease work immediately, lower the platform well in advance of an approaching storm and take shelter. Always check weather reports for the day and stay up to date with weather bulletins.
- If in doubt, do not put yourself at risk. Stop and ask.

USEFUL REFERENCES

- IPAF Operators Safety Guide (available on the ePAL app www.ipaf.org/ePAL)
- Manufacturer's Operators Manual (available via www.ipaf.org/en/manufacturers)
- Andy Access poster (available at www.ipaf.org/andyaccess)