

Incident periodical October 2022

Recent High Potential Incidents
Learnings and Recommendations
Industry Performance
Communications

Queensland Coal Mines Inspectorate

Coal Inspectorate



Resources Safety & Health
Queensland

1. Underground Incident – Unintended equipment movement

A CMW was installing primary support for the LW take off roof and face

The hand held bolting unit, known as a gopher was positioned on the steel panline

During operation, the gopher slipped on the steel surface of the panline and struck the CMW on the right foot, causing injuries.

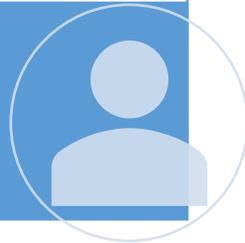
The impact caused fractures to his fourth and fifth toes and a nail bed injury on the CMW's fourth toe that required surgical repair



Recommendations

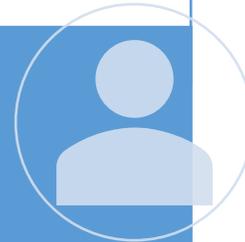
- Implement controls that prevent inadvertent contact between equipment and coal mine workers.
- Ensure the mines SHMS provides adequate processes for checking effective application of risk control measures.
- Ensure the mines SHMS provides for appropriate action to be taken if the SHMS risk control measures are identified as not effectively applied.

Site Senior Executive



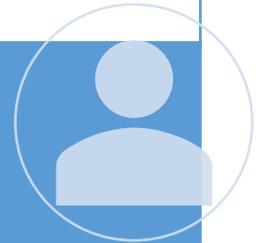
- Be aware of the hazard of steel on steel and ensure effective controls are being applied.
- Be aware and stay out of the line of fire.
- Take appropriate action if the SHMS risk control measures are not being effectively applied.

ERZCs



- Be aware of the line of fire
- Ensure that all of your body parts are out of the line of fire.
- Be aware of the hazard of steel on steel.
- Use effective controls, don't confuse your ambitions with your capabilities.
- If you need help to solve the problem, stop and ask the ERZC for help.

Coal Mine Workers



2. Surface Incident – Dragline and light vehicle collision

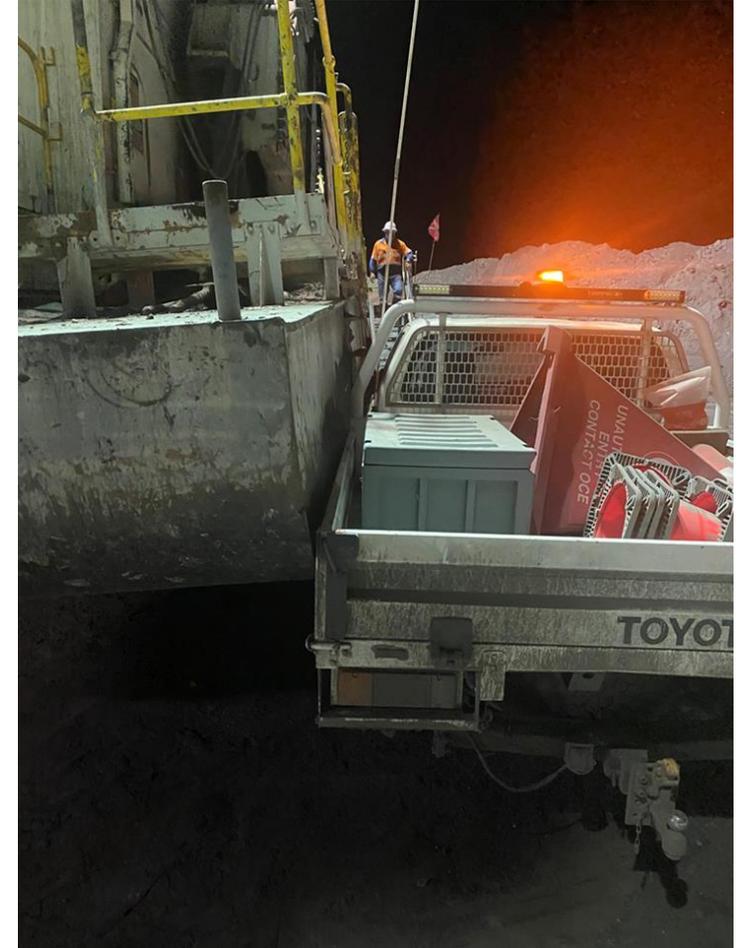
CMWs conducted a work area inspection, then parked their LV beside the access stairs onto the dragline shoe.

The CMW went to the cabin to review information then decided to use the dragline to check bench heights.

They disengaged the dragline brakes and swung the dragline to the west and placed the bucket on the adjacent strip.

The rotating dragline shoe pushed the LV in an arc as the dragline swung.

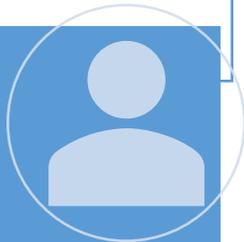
Fortunately no coal mine workers were in the vehicle



Recommendations

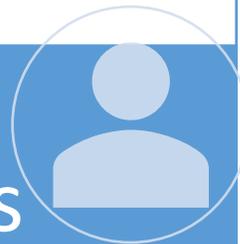
- Establish effective controls for parking light vehicles.
- Ensure the mines SHMS provides monitoring for effective application of risk control measures
- Ensure the mines SHMS provides for corrective action to be taken when the SHMS risk control measures are identified as not being effectively applied.

Site Senior Executive



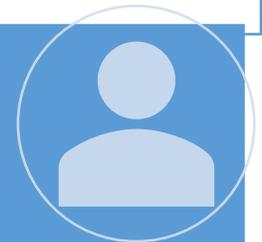
- Regularly audit CMW compliance with park up locations in and around draglines and other moving equipment.
- Take corrective action if the SHMS risk control measures are identified as not being effectively applied by the CMW.

OCE and Supervisors



- Ensure that you are aware of, understand, and comply with park up site procedures relevant to your task.
- The mine procedures and work instructions have the risk controls to save you from getting injured.
- Park vehicles in the designated parking area and use positive communication with operators to ensure your and your vehicle location is known at all times when operating in and around equipment

Coal Mine Workers



3. Underground Incident – Projectile

- CMWs were setting up a continuous miner to conduct maintenance.
- Boom safety stop pins were being fitted to isolate the boom.
- Damage to the chassis clevis had changed the contact point between the clevis and the safety stop pin onto the chamfered end of the pin.
- When the boom was lowered, the clevis contact with the chamfer provided the mechanism to eject the safety pin out into the rib with force.



Recommendations

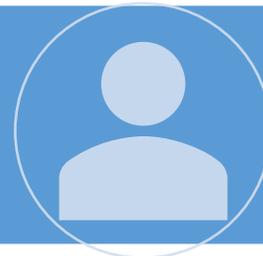
- Ensure site procedures include a process that confirms the equipment used for isolation of energy is fit for purpose before it is used.
- Review the maintenance strategy for plant to ensure that preventive maintenance inspections identify all failure modes of safety boom stops.
- Review OEM safety bulletins and alerts for plant and action recommendations as required.

Site Senior Executive



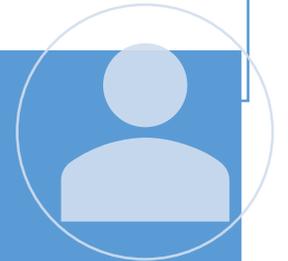
- Audit isolation of energy practices to ensure the devices being used are fit for purpose.
- Ensure that changes to preventive maintenance work orders are communicated to CMW.
- Ensure that safety related preventive maintenance workorders are completed as a priority.
- Review / audit the quality of safety related maintenance work.
- Train / retrain CMW in the correct methods of isolating energy.

ERZC and maintenance supervisors



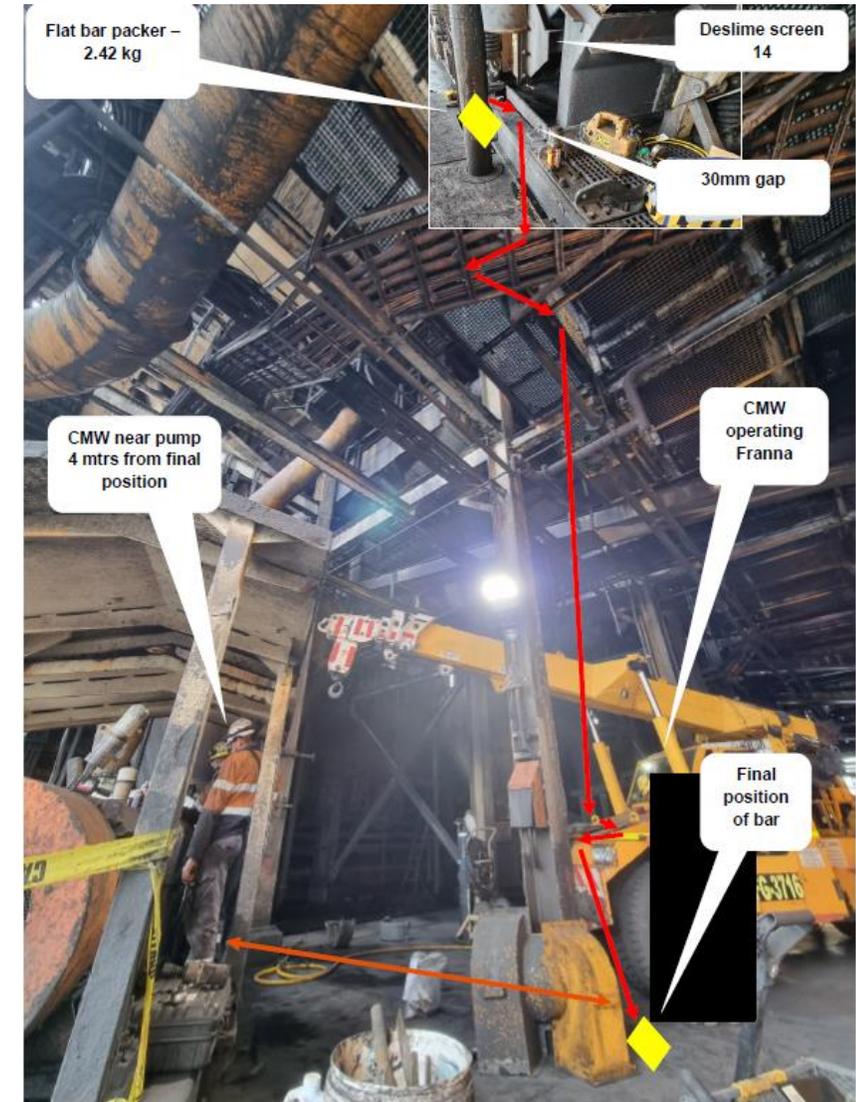
- Learn exactly how energy isolation devices are designed to work before you use them.
- Ensure energy isolation devices are in a fit condition for use, have not been damaged or modified.
- Never take short cuts when installing safety boom stops. E.g. if 2 pins are required fit bot pins, not just 1 pin.
- Be aware of no go zones.
- Slowly lower the cutter boom onto the stops. Do NOT shear down heavily." Applying hydraulic load in addition to the weight of the boom can damage the pins and clevis support.

Coal Mine Workers



4. CHPP Incident – Falling object

- One work team were tasked to replace springs on a desliming screen on one level.
- A second work team were completing tasks on the level below.
- A steel bar weighing 2.4kg slid through a floor gap and fell 10 metres to the lower level where the other CMW were working.
- The bar bounced off the front of a franna, ricocheted into a steel column before landing on the floor.
- The two coal mine workers were close to the steel travel path.



Recommendations

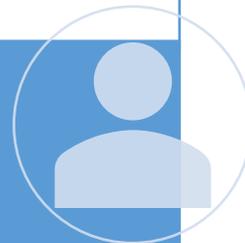
- Ensure your SHMS considers the hazards of falling objects, dropping objects and contains effective controls that prevent injury to coal mine workers.
- Ensure that your critical controls are identified, communicated, validated and effective through visible critical control audits

Site Senior
Executive



- Never allow one group to work above another work group, unless the risk controls for falling objects are in place and effective.
- Enforce compliance with critical controls to prevent injury, such as barricading the place above a work area and rescheduling work, to prevent work being undertaken and eliminating the risk of such incidents.

Supervisors



- Before commencing work, eliminate the hazard of objects falling into your work area, or of you dropping objects into another CMW's work area when risk assessing your tasks.
- Isolate the place above your work area so other CMW cannot drop objects onto you.

Coal Mine
Workers



5. Surface Incidents – Fall from height

- A CMW fell to the ground off the access stairs at the front of a rear dump truck.
- The CMW had parked the truck and initiated the lowering of the access stairs to get off the truck.
- On reaching the lower stair section, the CMW found the stairs were still raised because the attachment to lower the stairs had broken.
- The CMW used their foot to push the stairs down.
- The ladder section dropped away, the CMW overbalanced, falling to the ground and suffering minor injuries.

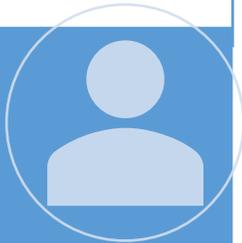
BROKEN
ATTACHMENT
POINT



Recommendations

- Ensure the risk assessments that underpin your SHMS have considered that CMW will have slips and lapses or make mistakes and the risk controls will still protect them from injury.
- Review your maintenance strategy for access systems
- Audit the prestart inspection and defect management systems to validate compliance and effectiveness

Site Senior Executive



- Ensure compliance with prestart and defect reporting procedures and processes.
- Conduct behavioural observations in the work area.
- Validate prestart inspections and defects on equipment
- Ensure that changes in maintenance work orders are communicated to CMWs

OCE and Supervisors



- Report defects on equipment and stop the use of the equipment where defects will present an unacceptable level of risk to your health and safety
- Know, understand, and follow the procedures for accessing plant.
- Follow the SHMS procedures for accessing plant.
- Stop, Look and assess before you take action.
- Maintain 3 points of contact when using plant access systems.

Coal Mine Workers



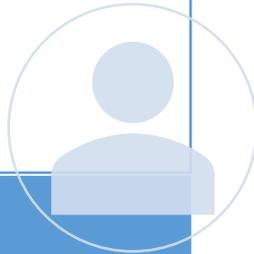
6. Incidents – Falling objects

- A rotary blasthole drill rig was operating on a blasthole pattern.
- The rotary head fell without warning from the top of the mast, landing on the drill platform in front of the operator's cabin.
- A defective link in the hoist chain connecting links had failed allowing the uncontrolled fall.



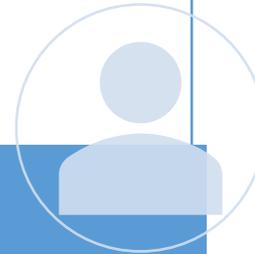
Recommendations

- Ensure the SHMS defect management system is easy for CMW to access and use.
- Ensure that the Change management process is effective and communicated to CMWs.
- Review the maintenance strategy for drills to ensure that all failure modes are identified and managed.



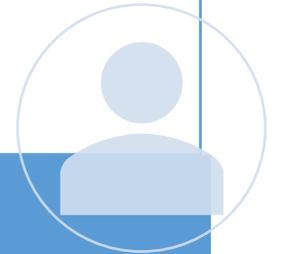
Site Senior
Executive

- Audit CMWs reporting of defects on equipment and assist them to use the reporting system effectively.
- Regularly do machine inspections with CMW to help them find the defects.
- Ensure that changes in maintenance work orders are communicated to CMWs.
- Ensure that CMWs are aware of the change management system.
- Apply the change management as required by the SHMS.



OCEs and
Supervisors

- Report defects using the correct defect management process at your mine.
- When incompatible parts are supplied for a task, STOP and report it to your supervisor.
- Never modify parts without first consulting your supervisor.
- Know and understand the change management system.
- Comply with the change management system.



Coal mine
workers

Industry Performance Update

July - November 2022



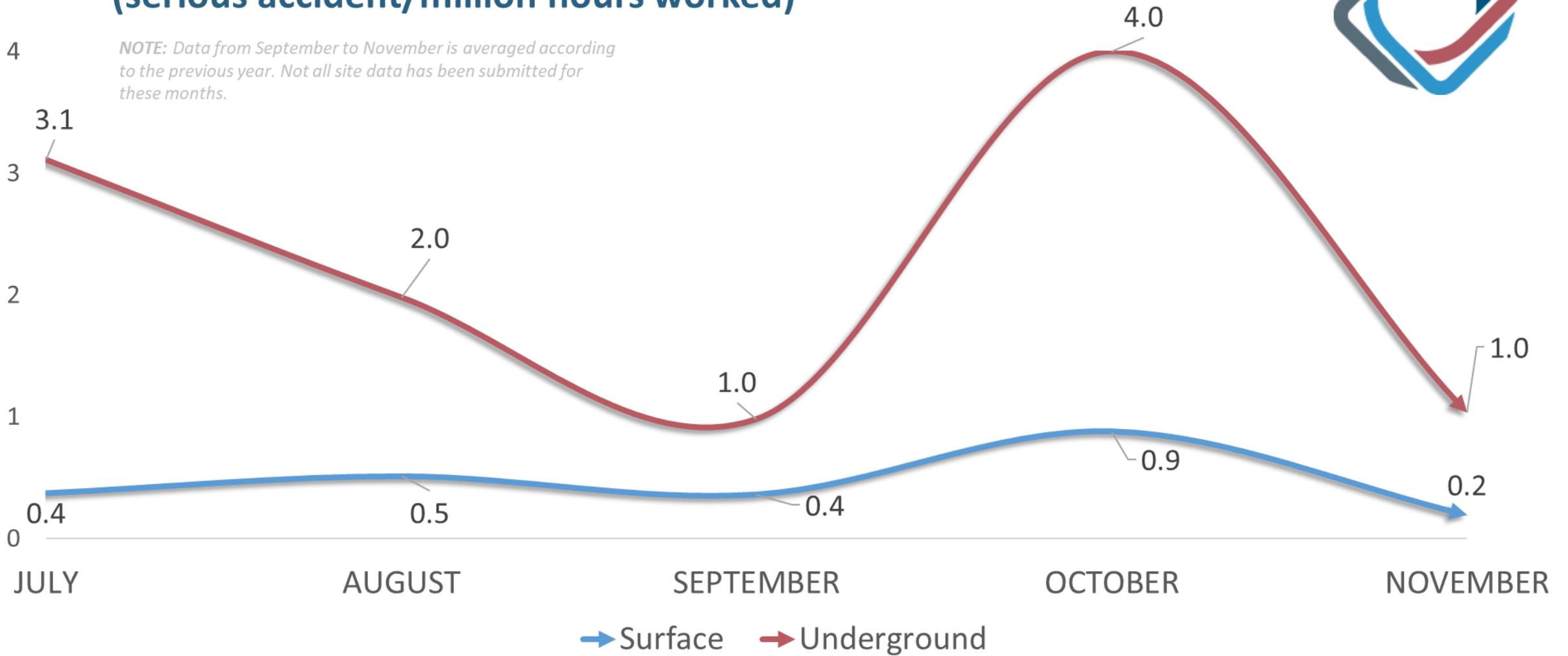
Coal Statistics – October 2022

- 144 HPIs received
- 9 Serious Accidents
- 10 Non-reportable incidents
- 17 Cases of reportable disease, 8 not attributable to mine exposure
- 17 Dust exceedances
 - 8 Respirable coal dust (1st trigger levels)
 - 0 Respirable dust (2nd trigger levels)
 - 8 Respirable crystalline silica (1st trigger levels)
 - 1 Respirable crystalline silica (2nd trigger levels)

Serious accident frequency rate per sector FY23 YTD (serious accident/million hours worked)



NOTE: Data from September to November is averaged according to the previous year. Not all site data has been submitted for these months.



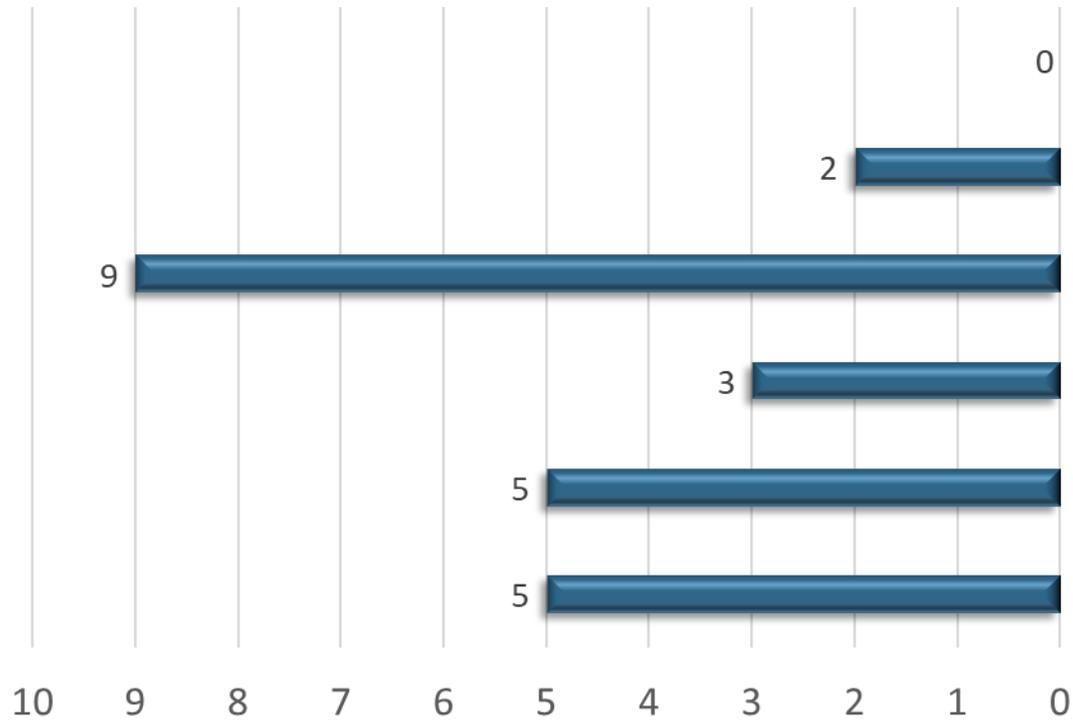
Data taken 5/12/2022



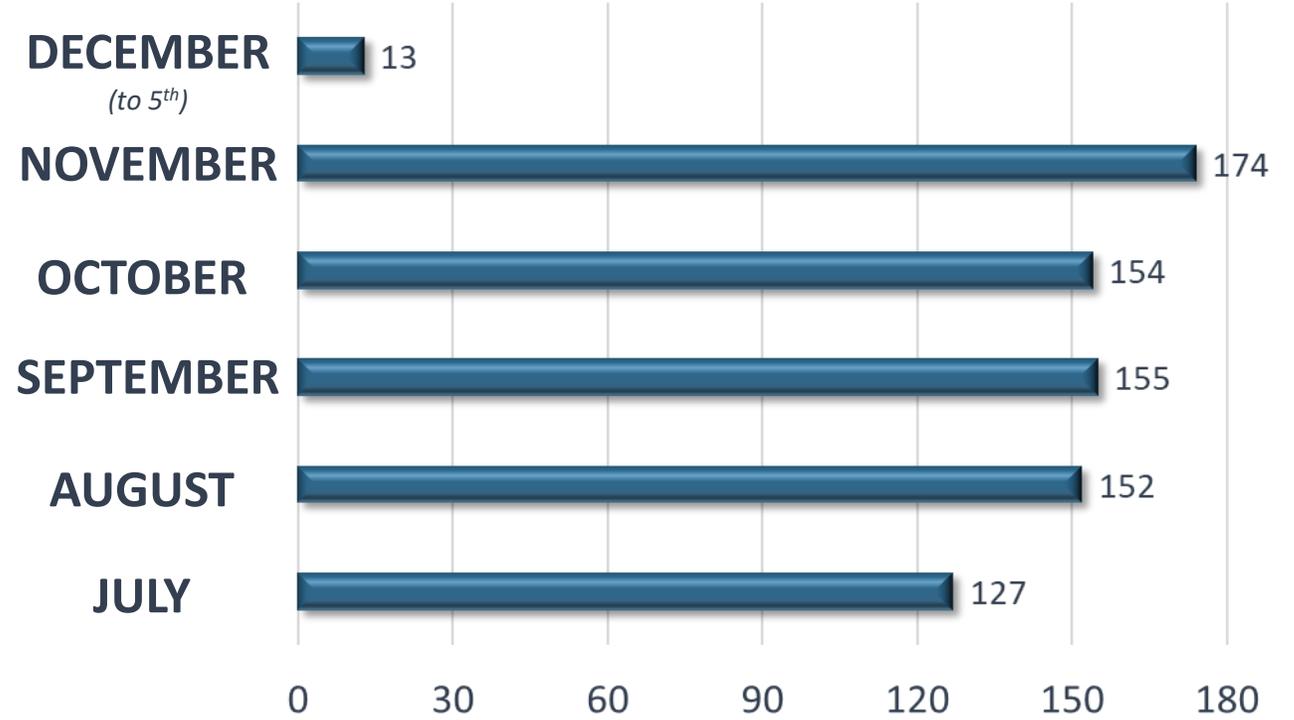
Serious Accidents and High Potential Incidents



24 Serious Accidents



775 High Potential Incidents



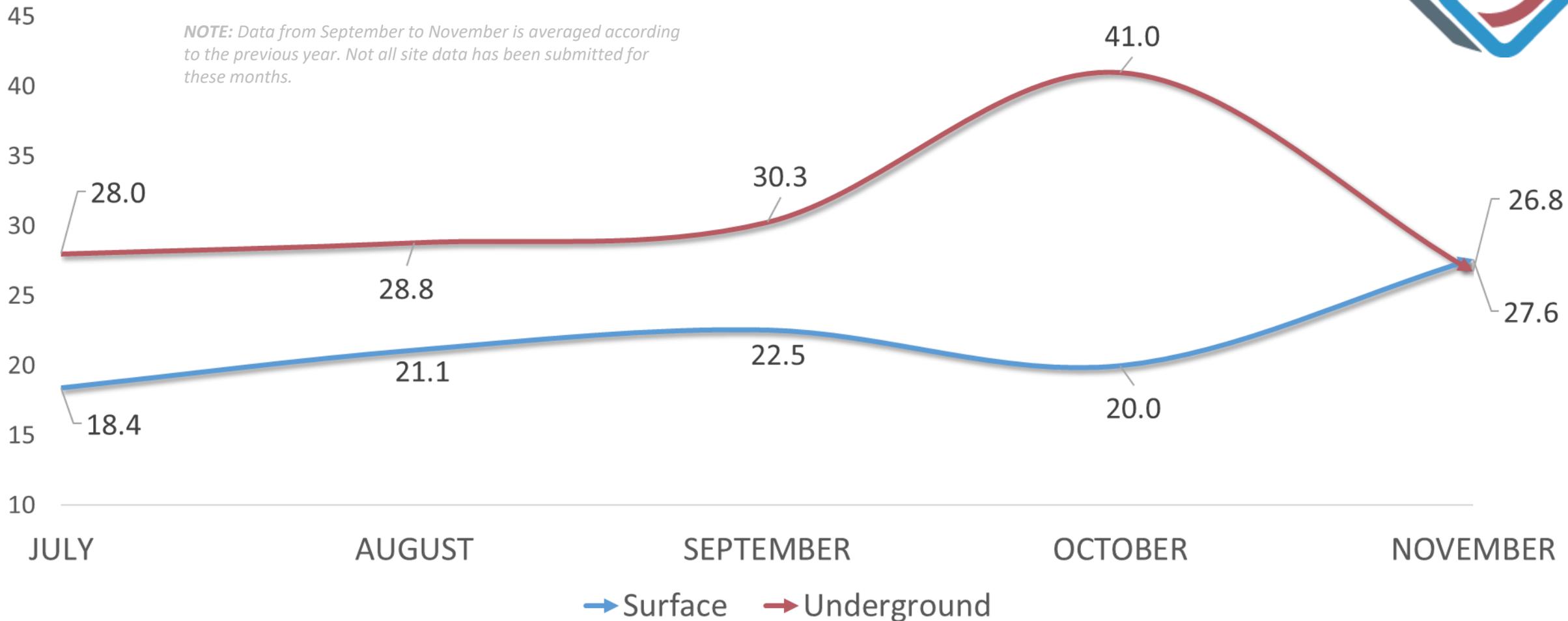
Data taken 5/12/2022





High potential incident frequency rate per sector FY23 YTD (high potential incident/million hours worked)

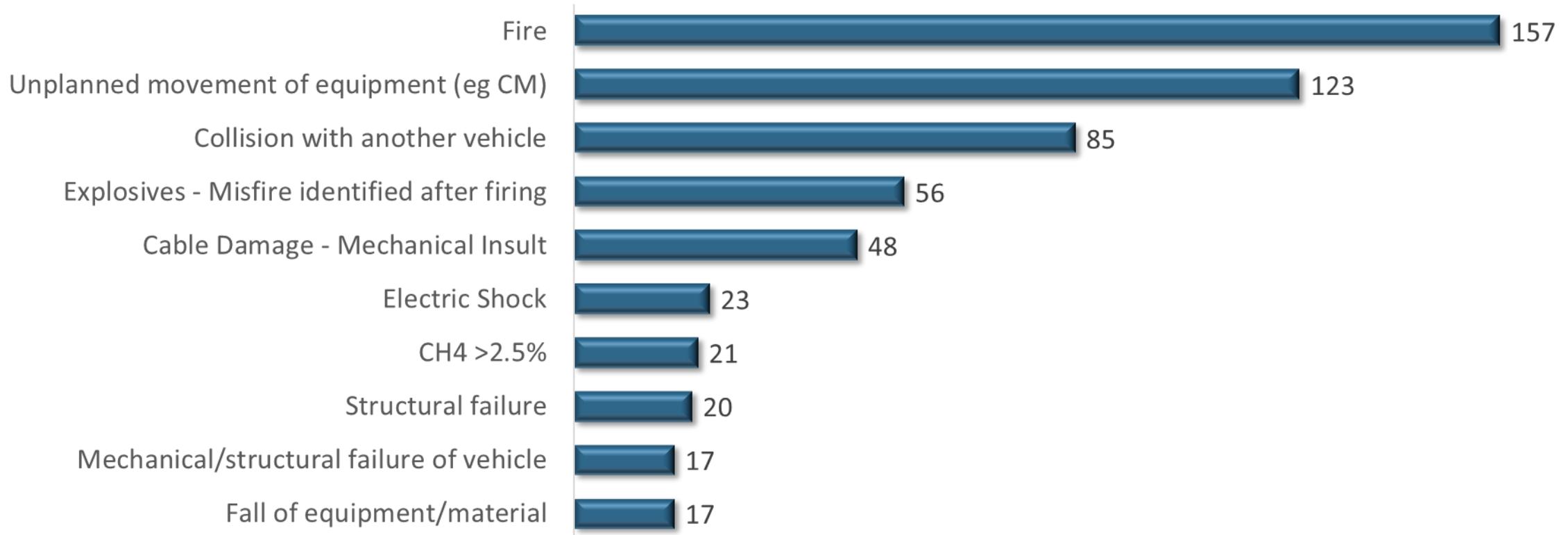
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Data taken 5/12/2022



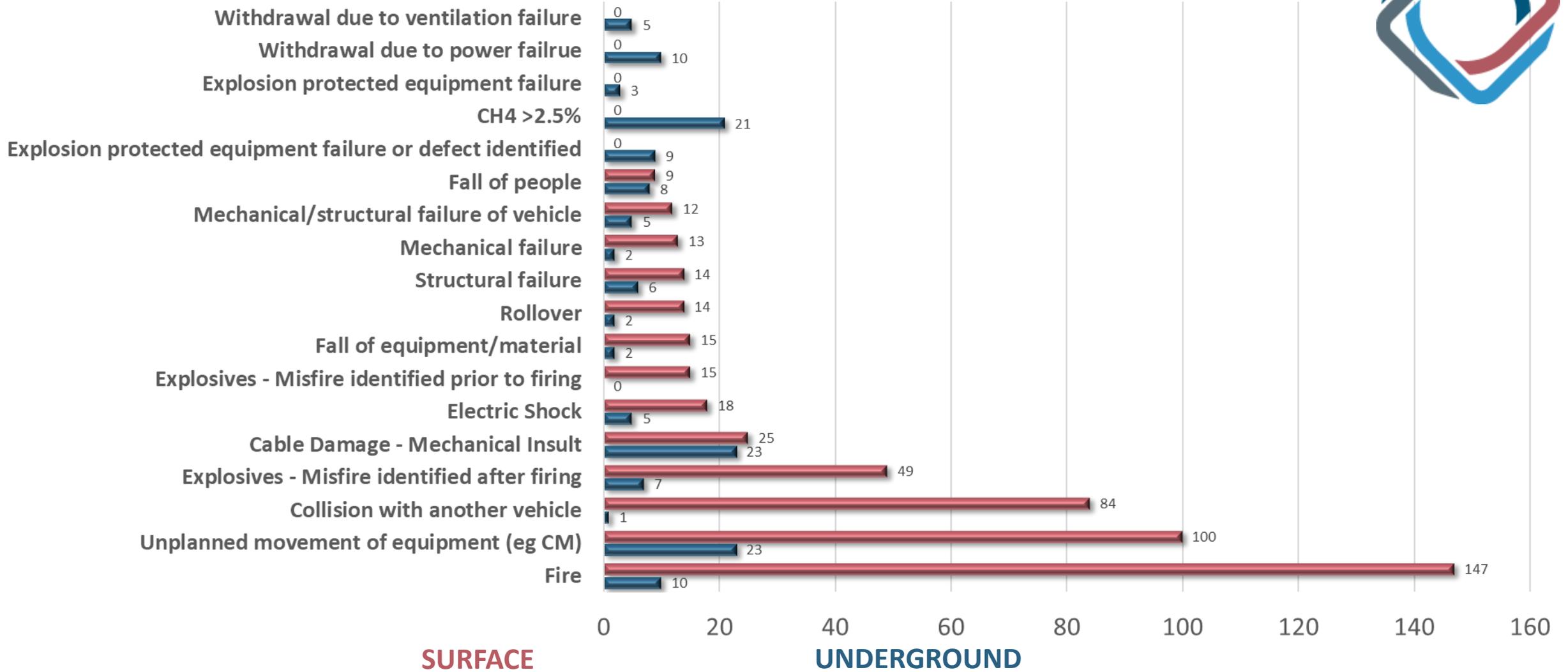
Top ten hazards FY23 YTD



Data taken 5/12/2022



Top Hazards FY23 YTD by sector



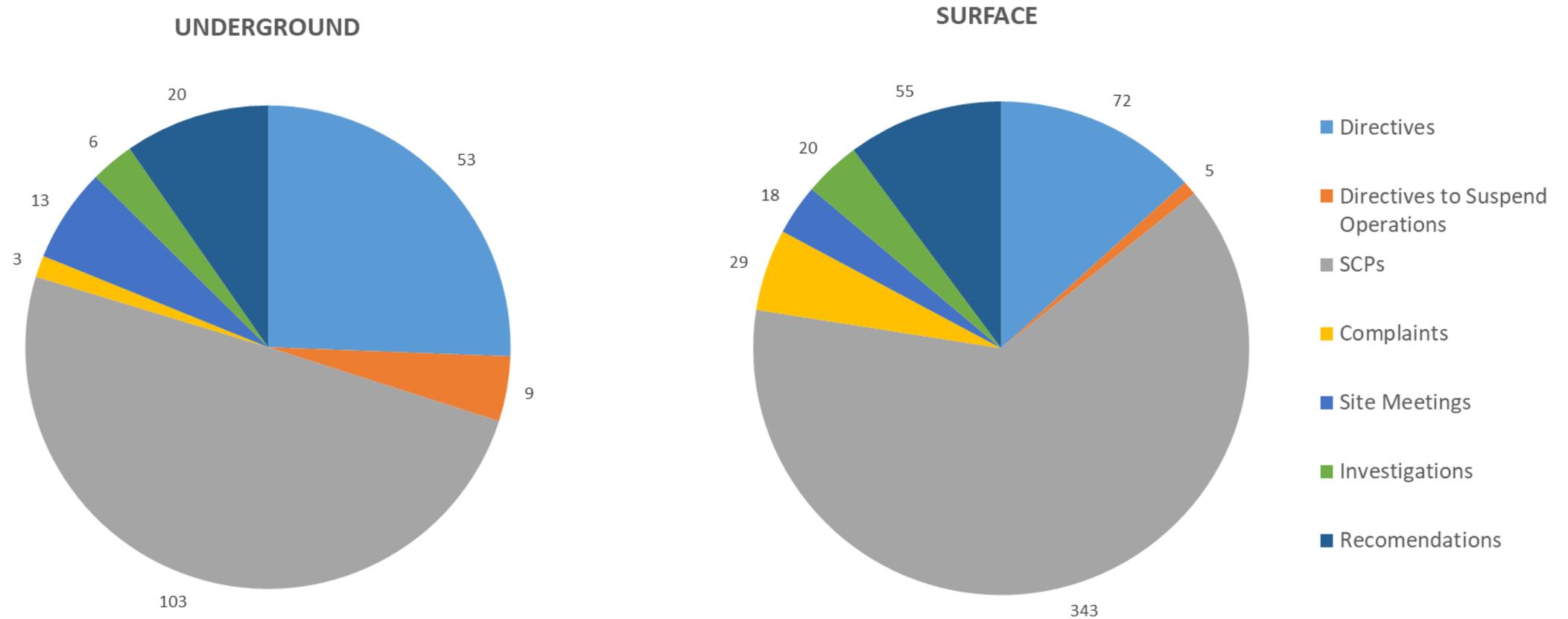
SURFACE

UNDERGROUND

Data taken 5/12/2022



RSHQ Compliance Activities FY23 YTD



Data taken 5/12/2022

Communications from the Coal Mines Inspectorate

[Expert Report - Assessing the Risk of Operating Mining Equipment During Lightning Storms](#)

[Notification from Hastings Deering Australia](#)

QUICK LINKS

Periodicals

Recognised Standards

Safety Notices

Coal Mining Safety and Health Act 1999

RECENT SAFETY NOTICES

Safety Bulletin 207

Managing the risk of storm season

Safety Bulletin 206

Learnings from confined space, spray painting event

Safety Bulletin 205

Risk management during lightning events

Safety Bulletin 191

UPDATED
Managing heat exposure in coal mines

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