

2025

Toward a Safe Day Every Day 2025: Beyond the Toolbox Meeting

Results from the 2024 Canadian Mineral Exploration,
Environment, Health & Safety Survey

[EXPLORATIONSURVEY.CA](https://explorationsurvey.ca)

AME Association
for Mineral
Exploration



PROSPECTORS &
DEVELOPERS
ASSOCIATION
OF CANADA



TOWARD A SAFE DAY EVERY DAY 2025:

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Introduction

The Association for Mineral Exploration (AME), Prospectors & Developers Association of Canada (PDAC), and the Canadian Diamond Drilling Association (CDDA) are pleased to present the 20th annual Toward a Safe Day Every Day report with findings from the Canadian Mineral Exploration, Environment, Health and Safety Survey. Since its inception in 2005, this collaborative initiative has provided valuable insights into safety performance and practices across the Canadian mineral exploration sector. The survey is voluntary and completed annually by organizations conducting mineral exploration in Canada. It is designed to collect data on incidents and key health and safety program metrics, and the results are compiled and published anonymously in this report. By sharing aggregated findings and year-over-year trends, the initiative aims to support the advancement of best practices across the industry and recognition of health and safety performance through industry awards.

The 2024 survey saw record-high participation since the COVID pandemic, reflecting the industry's increased engagement in the growing importance of health and safety priorities across the mineral exploration sector. The number of contributing organizations grew from 53 in 2023 to 70 in 2024.

Fluctuating over recent years, the number of hours reported in 2024 declined slightly to 7.4 million hours from 8.0 million hours worked in 2023. That is the equivalent of about 3,710 full-time employees.

The lost-time injury frequency rate had minimal fluctuation of 0.30 in 2024, with 0.07 increase from 2023¹. It remains below the rate for all Canadian industries – most recently reported as 2.02 per 100 workers by 2024 the Association of Workers Compensation Boards of Canada in 2024.

The industry has encouragingly broken the six-year fatal-incident trend and recorded zero fatalities for this survey year. Developed safety programs, improved policies, and established plans shown in the report summarizes the efforts of the industry to extend this fatality-free streak.

¹Frequency rates expressed throughout this report are expressed as the number of incidents per 200,000 hours, or 100 worker years

SAFETY REPORTING

The proportion of companies reporting formal health and safety policy decreased slightly from 94% in 2023 to 93% in 2024. Similarly, health and safety management plans had a reduction from 83% in 2023 to 81% in 2024. In contrast, organizations reporting health and safety programs remained stable at 94%, consistent with 2023 results.

89% of companies conduct health and safety simulation exercises at every field site, moderately increasing throughout the survey years, showing developing organizational readiness and prevention efforts. Worker-level safety discussions remained consistent and strong at 97% in 2024. Additionally, safety meetings at the board level continue to rise, increasing from 87% in 2023 to 91% in 2024, signalling stronger strategic oversight and commitment to safety.

Data shows fewer companies report having health and safety policies and management plans. This trend may be influenced by increased participation from smaller companies, which may have less formalized documentation. Taking this into consideration, participation in health and safety simulations as well as safety meetings continue to rise. This trend suggests that organizations may be shifting focus from paperwork to a growing emphasis on practical readiness, although it is encouraged to continue implementing a strategic framework that management plans provide.

Across all indicators, the industry continues to demonstrate leadership excellence in health and safety. Companies are enhancing their efforts in the health and safety programs while there can be continuous improvement in management plans. There is great strength in worker-level safety discussions and toolbox meetings that are set in place prior to working throughout the day that reduces the risk to worker incidents. The trend shows a clear commitment to intentional, informed, and accountable safety practices.

ENVIRONMENTAL REPORTING

The percentage of companies having an environmental policy remains consistent at 93%. Similarly, environmental programs continued their upward momentum for the second year in a row, rising from 89% to 92%. In contrast, the companies with an environmental management plan declined slightly to 81%.

This minimal decline appears to be linked to grassroots companies and companies that contract out exploration activities, as these groups may not yet have formal environmental plans established. However, this new participation is encouraging; by identifying these gaps, the survey is helping companies recognize the importance of developing formal environmental management plans – and many have already expressed readiness to advance their practices.

PSYCHOLOGICAL SAFETY AND MENTAL HEALTH REPORTING

This recent survey year more than half of respondents (61% or 43 companies) reported having an equity, diversity, and inclusion (EDI) policy in place. While 43 companies are a notable increase compared to previous survey years – 36 companies reported having an EDI policy in 2022 – the overall proportion has decreased by 14%. This suggests that the total number of companies implementing EDI policies has grown but should still be highlighted as a targeted growth improvement.

Similarly, the number of companies that have trained personnel in mental health first aid on project sites increased slightly in the 2024 survey year (from 19 responses to 24), while the proportion of companies that trained personnel has gradually decreased over the years – from 42% in 2022 to 34% in 2024. More companies are adopting the practice, but participation in the survey is gradually growing, so adoption is not keeping pace proportionally.

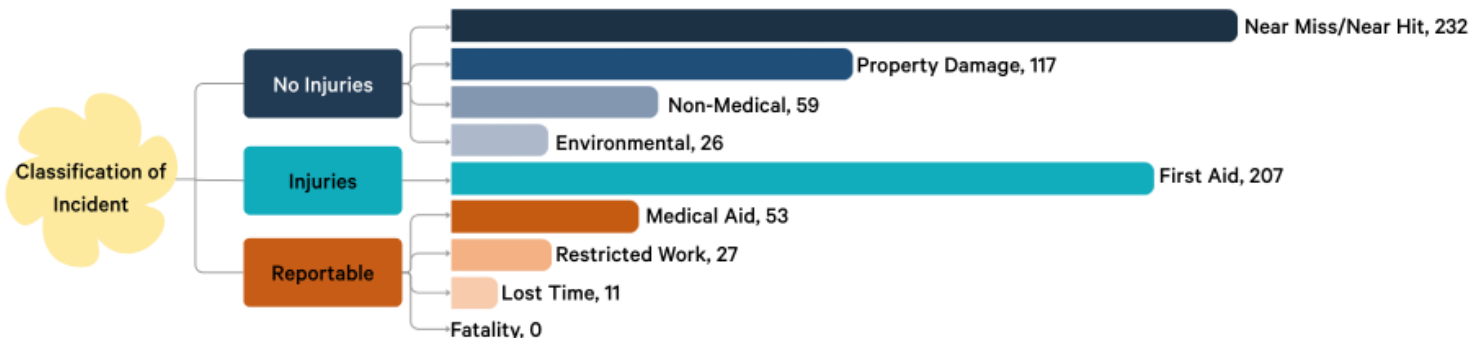
LAGGING INDICATORS

Lagging indicators are measures of actions taken after incidents happened. AME, PDAC, and CDDA encourage organizations to report these to inform initiatives and to build awareness of the risk of both injury and damage to property.

Through the survey, 28 companies reported 732 incidents, compared to 25 companies reporting 610 incidents in 2023. 298 of the incidents resulted in injury, a slight increase from 284 incidents in 2023. Notably, 80 of these (11% of incidents and 27% of injuries) resulted in the need for medical attention and/or a restricted work plan.

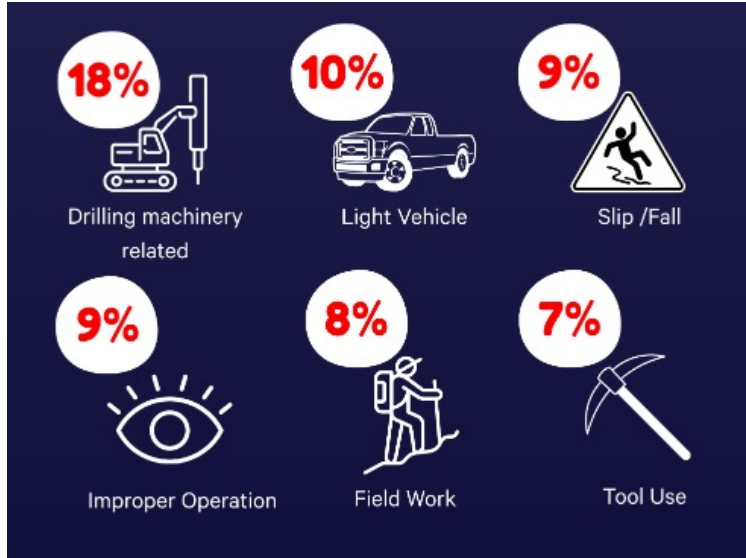
The lost-time injury rate in the Canadian mineral exploration industry rose slightly from 0.23 in 2023 to 0.30 in 2024 but remains well below the 0.81 rate recorded in 2021. The lost-time injury rate of reportable injuries this survey year has greatly improved in recent years and has dropped significantly from 4.43 in 2021 to 2.4 in 2024.

While total incidents have a considerable increase compared to last year, the continued decline in reportable injuries suggests the increasing effectiveness in the industry’s safety policies and programs. It is important to recognize the value of safety tools, health and safety short courses, and continuous worker-safety discussions.



INCIDENT TYPE

Drilling machinery related injuries and light vehicle injuries account for 28% of all 732 incidents and 44% of reportable injuries. Slip and falls increased from 47 incidents at 7% in 2022 to 68 incidents at 9% in 2024. On the other hand, field work incidents are at 8% (55 incidents) in 2024.



KEY TAKEAWAYS:

Emphasize thorough pre-operation checks for drilling activities and associated equipment, including proper preparation, routine inspections and adherence to manufacturer-recommended service schedules.

Defensive driving should always be practiced, particularly in poor weather conditions or adverse road and driving conditions. Drivers should always use headlights to improve visibility, while also ensuring vehicles are equipped with adequate tires and a reliable communication system to reduce vehicle incidents.

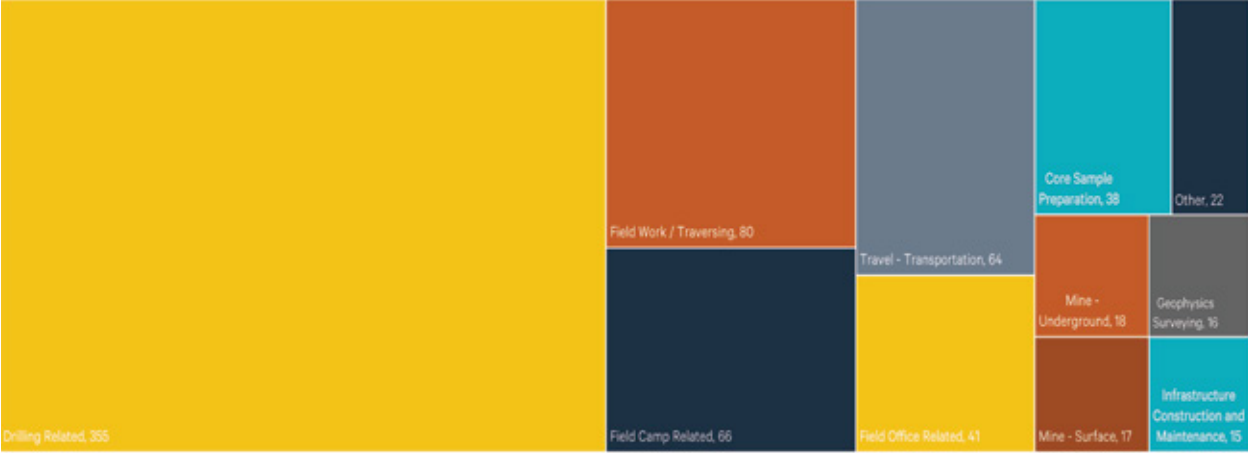
Satellite communication devices (Satellite Messenger Handhelds), GPS devices, compasses, and radios must be accessible for all workers for travel-related safety, especially in remote and challenging environments.

Workers should be focused and attentive to their surroundings and equipment in the field as lack of awareness is one of the leading contributors to incidents. This should be discussed in toolbox and board meetings.

Workers should also maintain proper body positioning and follow the “three-point contact” method – keeping two hands and one foot, or two feet and one hand secure – to minimize slips, trips, and falls.

INCIDENTS BY ACTIVITY

The 2024 survey reported 355 (48%) drilling related incidents. 15% of the drilling machinery related incidents are reportable injuries (medical aid, restricted work, and lost time).



KEY TAKEAWAYS:

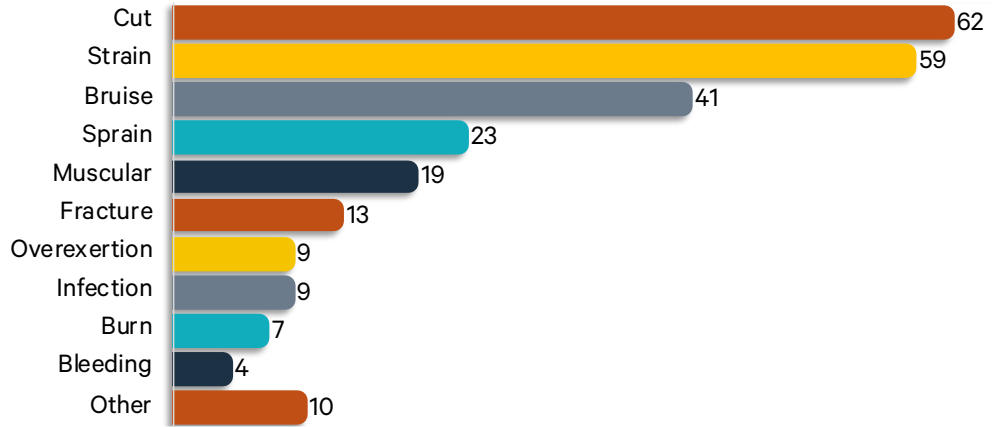
Pinch points and hand lacerations are the most frequent drilling related injuries and can be mitigated by keeping hands clear and stopping work when equipment is unstable.

Challenging field terrain increases risk of repetitive motion injuries, which can be reduced through proper lifting techniques and strengthening practices.

It is AME, PDAC and CDDA’s ongoing commitment to minimizing high frequency of incidents in the mineral exploration industry, and the reporting of potential incidents is a key step. This reporting process empowers exploration companies across Canada to assess potential incidents to better implement protocols aimed at mitigating impacts at the workplace. This enhances safety measures in the exploration industry.

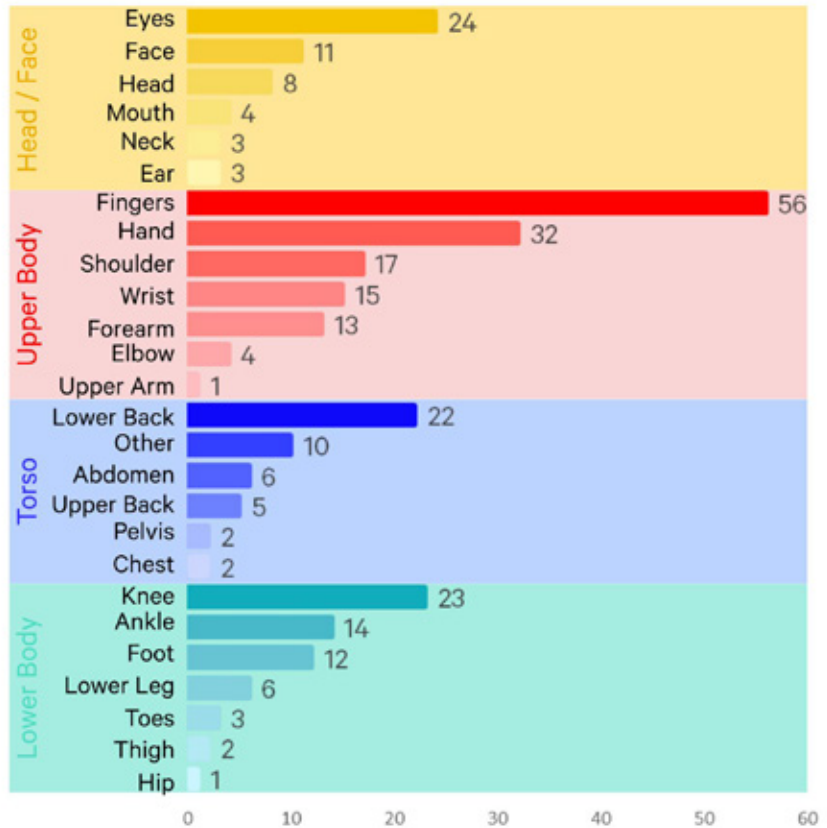
NATURE OF INJURY

In 2024, 266 incidents (36% of all incidents) resulted in some form of injury. Cuts, strains, bruises, sprains, and muscular injuries account for 38% of all injuries.



LOCATION OF INJURY

Location of injury was recorded for the sixth consecutive year in the 2024 survey. Across four main body-location categories, the upper body continues to present the highest injury risk. The most frequently reported injury sites include finger and hands (30%), eyes (8%), knees (8%), and lower back (7%). The distribution of injuries remained relatively stable between the 2023 and 2024.



KEY TAKEAWAYS:

Many injuries are preventable with proper PPE, including impact- and cut-resistant gloves for drilling, insulated gloves for fieldwork, and traction aids for snowy or slick surfaces.

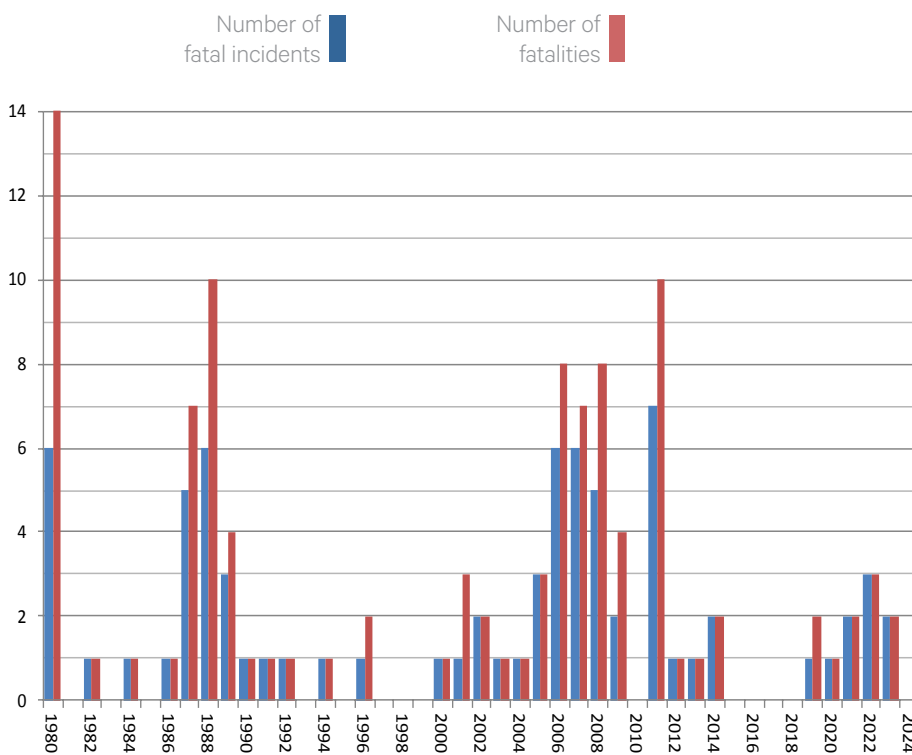
FATALITIES

AME and PDAC track fatalities and their causes separately from the survey. This information is derived from a combination of reporting through government-led investigations, communications with members, company news releases and news reports.

Altogether, there have been 106 fatalities in mineral exploration in Canada since 1980. Encouragingly, the industry has now broken the five-year fatal-incident trend from 2019 through 2023, and no fatalities have been reported since. In total, there have been 13 fatality-free years, including a four-year period from 2015 through 2018. Lower incident rates typically correspond to fewer opportunities for serious or fatal outcomes. By maintaining a high level of compliance, safety programs, improved policies, and plans adopted by the industry can lead to extending a fatality-free streak.

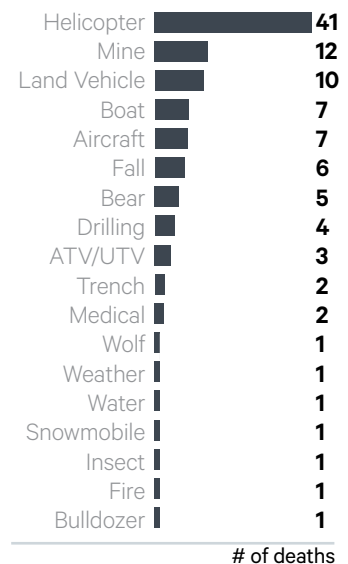
Historically, increased numbers and rates of fatalities and injuries have generally corresponded with peaks of activity in the industry. This trend appears intact, although to a lesser degree than in previous upswings, which is likely the result of a combination of due diligence, learned lessons from past experiences and a growing culture of safety and associated training in the industry.

FATALITIES IN MINERAL EXPLORATION IN CANADA 1980-2023



PRIMARY CAUSE OF FATALITIES 1980-2023

Transportation-related incidents comprise of 75 fatalities (71%) since 1980 and have been related to all but three of the 21 fatalities (88%) in the mineral exploration industry since 2010.



WHAT YOU CAN DO

- ▶ Regularly review the Standard Operating Procedures (SOPs) and health and safety management to ensure they are aligned with operational practices.
- ▶ Regularly review the results of risk assessments and ensure that the hierarchy of controls are applied in the field – not just documented.
- ▶ Prioritize meaningful toolbox meetings, encourage participation of all workers and make the toolbox talks part of the daily routine with continuous guidance throughout the workday.
- ▶ Promote physical and mental readiness by encouraging stretch-and-flex routines, hydration, and awareness of personal limits.
- ▶ Before going in the field, take responsibility to seek out information - including resources from the PDAC and AME – available online free of charge.
- ▶ Provide or ask about resources for safety-related topics such as travel and transportation, proper lifting, drill equipment safety, proper footwear and working in icy conditions.

RESOURCES

SAFETY GUIDELINES AND MANUALS

The PDAC Field Safety Pocket Guide is available in English, French and Spanish. This guide, made for field portability, includes a variety of safe fieldwork practices that will increase one's awareness of the risks, hazards, and dangerous situations inherent in exploration work. The pocket guide is available on the PDAC website; and an extensive health and safety procedural document, the Driving Responsible Exploration Health & Safety Toolkit, is available for download or print as well. Find these resources at <https://pdac.ca/driving-responsible-exploration/health-safety>.

A comprehensive source of safety information for mineral exploration focused on Western Canada is AME's Safety Guidelines for Mineral Exploration in Western Canada. The guidelines are available online at <https://amebc.ca/what-we-do/health-safety/> and from the AME office.

TOOLS

Risk management and helicopter slinging training tools may be viewed and downloaded at <https://amebc.ca/resources/tools/>.

Mental health aid and wellness resources promote awareness and provide support in remote areas where access to therapy is limited. Find these resources at <https://www.cdda.ca/health-and-wellness-resources/>.

REPORTING

Complete the Canadian Mineral Exploration Environment, Health & Safety Survey at <https://explorationsurvey.ca>.

PDAC Field Safety
Pocket Guide



AME's Safety Guidelines for
Mineral Exploration



Risk Management and Helicopter
Slings Training Tools



Mental Health Aid and
Wellness Resources



PDAC Health & Safety
e-Toolkit



Exploration
Survey



OUR 2024 AWARD RECIPIENTS

There are **53** recipients of Safe Day Everyday Awards for their performance in 2024, up from **45** recipients in 2023 due to higher participation of individual organizations in the survey. Additionally, two companies received Safe Day Everyday Participation Awards for their longstanding contributions to the survey.

SAFE DAY EVERYDAY GOLD AWARD

AME, PDAC, and CDDA are pleased to recognize **Foraco Canada** with the Safe Day Everyday Gold Award for achieving the highest number of hours without a lost-time incident, totaling **1,091,972** hours. While **Rio Tinto Exploration** receives the Safe Day Everyday Gold Award for achieving **153,854** hours without a reportable injury – no incidents resulting in lost time, restricted work, or medical aid.

SAFE DAY EVERYDAY SILVER AWARD

14 companies are recognized with the Safe Day Everyday Silver Award for 2024. This award is presented to organizations reporting more than 10,000 hours throughout 2024 without a reportable injury.

Altius Resources Inc
Amex Exploration
Endurance Gold Corporation
Fission Uranium Corp.
Geotronics Consulting Inc.
Golden Cariboo Resources
Imperial Metals Corporation

Kodiak Copper Corp.
Northern Superior Resources Inc.
Prospect Ridge Resources Corp.
Surge Copper Corp.
Teck Resources Limited
Tudor Gold Corp.
Westhaven Gold Corp.

SAFE DAY EVERYDAY BRONZE AWARD

36 companies are recognized with the Safe Day Everyday Bronze Award for reporting a year without a lost-time incident in 2024.

| | | |
|----------------------------------|------------------------------|------------------------------------|
| Alamos Gold | Gold Terra Resource Corp. | NorthWest Copper |
| Ascot Resources | Hy-Tech Drilling | Pacific Ridge Exploration |
| Auracle Geospatial Science Inc. | IAMGOLD Exploration | Purepoint Uranium Group Inc. |
| AWC Digital Exploration Services | Inventus | Quebec Precious Metals Corporation |
| Boart Longyear | Klondike Gold Corp. | Rocky Mountain Drilling Inc. |
| Coast Copper Corp | Kootenay Resources Inc. | Scottie Resources |
| Dolly Varden Silver | Lithos Geological Inc. | Taranis Resources Inc. |
| Durfeld Geological | Major Drilling | Tchaikazan Resources Inc. |
| Finlay Minerals Ltd. | MoGeotechnical Services Inc. | Team Drilling |
| Forage Downing Drilling | MTB Metals Corp | Tinova Resources Corp. |
| Galore Creek Mining Corporation | North Arrow Minerals Inc. | Trailbreaker Resources Ltd. |
| Geotech Drilling Services Ltd. | North Coal Ltd. | Watts, Griffis and McOuat Ltd. |

SAFE DAY EVERYDAY PARTICIPATION AWARD

Driftwood Diamond Drilling Ltd. and **IAMGOLD Exploration** are recognized for participating in the Canadian Mineral Exploration Environmental, Health & Safety Survey for ten consecutive years.

Previous participants of the Participation Award who have continued to participate in the survey every year include:

Altius Resources Inc. (17 years)
Boart Longyear (11 years)
Eldorado Gold Québec (11 years)
Foraco Canada (12 years)
Hy-Tech Drilling (18 years)
North Coal Ltd. (11 years)
Orano Canada (16 years)
Team Drilling (12 years)
Teck Resources (20 years)
TerraLogic Exploration (20 years)
Rio Tinto Exploration Canada Inc. (14 years)



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TOWARD A SAFE DAY EVERY DAY 2025: *Beyond the Toolbox Meeting* is jointly produced by the Association for Mineral Exploration, Prospectors & Developers Association of Canada and Canadian Diamond Drilling Association.

AME

800-889 West Pender Street
Vancouver, BC V6C 3B2
Tel. 604.689.5271
amebc.ca
info@amebc.ca

PDAC

170 University Avenue, Suite 800
Toronto, ON M5H 3B3
Tel. 416.362.1969
pdac.ca
info@pdac.ca

CDDA

1-236 Worthington Street West
North Bay, ON P1B 3B4
Tel. 705.476.6992
cdda.ca
office@cdda.ca