

CAIRS Fiscal Year 2024 In Review

Introduction

The Computerized Accident/Incident Reporting System (CAIRS) is a database used to collect and analyze Department of Energy (DOE) and DOE contractor reports of work-related injuries, illnesses, and fatalities. Data collection is required by DOE Order 231.1B. “Environment, Safety and Health Reporting” and is managed by the Office of ES&H Reporting and Analysis (EHSS-23).

This Operating Experience Summary (OES) is an overview of DOE-wide performance for Fiscal Year (FY) 2024 where 1,369 work-related injuries/illnesses were reported which was a slight decrease of 165 cases from FY 23. For comparison, each table includes the previous four years performance data.

FY CAIRS Reporting Summary

Table 1 is a listing of the total number of work-related injuries and illnesses that have been submitted into CAIRS over the past five fiscal years along with the respective work hours and the corresponding Total Recordable Case (TRC) Rate and Days Away, Restricted or Transferred (DART) Case Rate.

Table 1: Total cases submitted into CAIRS by FY along with incidence rates and work hours

Fiscal Year	Work hours	Total number of cases (less COVID-19 cases)	TRC Rate	DART Case Rate
2024	324,116,748	1,369 (1,316)	0.84	0.36
2023	307,344,427	1,534 (1,333)	1.00	0.51
2022	292,645,520	1,809 (1,155)	1.24	0.73
2021	283,262,088	1,475 (1,125)	1.04	0.59
2020	266,912,057	1,047 (957)	0.78	0.43

Table 2: DOE COVID-19 cases

Fiscal Year	# of COVID-19 cases
2024	53
2023	201
2022	654
2021	350
2020	90

Table 2 shows the number of COVID-19 cases that have been submitted to CAIRS. It should be noted that COVID-19 cases continue to impact the total TRC and DART rates since FY 2020. COVID-19 is considered a respiratory illness under criteria established by the Occupational Safety and Health Administration (OSHA) and is recordable if a worker is infected while performing work-related duties.

Table 3: The total number of CAIRS cases submitted by FY and categorized into nine “event categories” which best describes the way the injury/illness occurred or was inflicted by the source of the injury/ illness.

Event category	FY2024	FY2023	FY2022	FY2021	FY2020
Bodily reaction and exertion	536	551	518	476	368
Contact with objects and equipment	375	393	292	335	297
Falls	242	248	213	183	167
Exposure to harmful substances or environments	92	95	95	99	66
Pandemic (COVID-19)	53	201	654	350	90
Other Events or Exposures	31	19	20	15	39
Transportation accidents	30	21	7	11	14
Assaults and Violent Acts	9	5	8	5	3
Fires and explosions	1	1	2	1	3
Total for Fiscal Year	1,369	1,534	1,809	1,475	1,047

Table 3 summary

1. The highest number of cases were due to worker overexertion and bodily reactions which can result in muscle strains, sprains, back injuries, etc.
2. The second highest category was worker contact with objects and equipment due to struck by/against, caught in/pinched, etc. which can result in abrasions, lacerations, fractures, etc.

3. The third highest category was worker injury due to falls on the same level, falling from ladders, scaffolds, etc. which can result in fractures, sprain/strain, contusions, etc.

Conclusion

The information contained in CAIRS provides a centralized collection of data for users to perform various analyses, including developing trends and identifying potential hazards. Analysis of injury and illness data is a widely recognized method for discovering workplace safety and health problems and for tracking progress in solving those problems and is required by DOE Order 231.1B.



The Office of Environment, Health, Safety and Security (EHSS), Office of ES&H Reporting and Analysis publishes OES articles to promote safety throughout the DOE Complex through the exchange of lessons-learned information among DOE facilities and program offices.

For further information or assistance related to this OES, please contact Craig Schumann, CAIRS Program Manager, at (630) 252-9176 or Craig.Schumann@hq.doe.gov.