

CAIRS Fiscal Years 2021-2025 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 Data Strategy and Performance (EHSS-23).

This Operating Experience Summary (OES) is an overview of DOE-wide performance for Fiscal Years (FY) 2021-2025, specifically regarding reported work-related injuries and illnesses. The number of cases showed a slight decrease from FY 2024. For comparative analysis, each table includes performance data for the previous five years.

FY CAIRS Reporting Summary

Table 1 is a listing of the total number of work-related injuries and illnesses that have been submitted to CAIRS over the past five fiscal years. This data is accompanied by work hours, along with the 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 incident rates and work hours

Fiscal Year	Work Hours	Total Number of Cases (less COVID 19 cases)	TRC Rate	DART Case Rate
2025	314,196,590	1,183 (1,175)	0.75	0.32
2024	323,458,826	1,400 (1,347)	0.87	0.38
2023	307,344,473	1,535 (1,334)	1.00	0.51
2022	292,645,520	1,800 (1,146)	1.23	0.73
2021	283,262,088	1,444 (1,094)	1.02	0.59

Table 2: DOE COVID-19 Cases

Fiscal Year	# of COVID 19 cases
2025	8
2024	53
2023	201
2022	654
2021	350

Table 2 shows the number of COVID-19 cases submitted to CAIRS. COVID-19 cases have directly impacted the total TRC and DART rates over the years. As defined by the Occupational Safety and Health Administration (OSHA), COVID-19 is considered a respiratory illness and is recordable if a worker is infected while performing work-related duties. With the steady reduction of such cases, future OES documents may not present COVID-19 data unless required otherwise.

Table 3 presents the total number of CAIRS cases, organized by FY and grouped into nine "event categories." These categories describe the primary way the injury/illness occurred or was inflicted by its source.

Event Category	FY2021	FY2022	FY2023	FY2024	FY2025
Bodily reaction and exertion	467	516	551	552	498
Contact with objects and equipment	325	289	392	378	342
Falls	176	211	249	246	196
Exposure to harmful substances or environments	95	93	96	100	103
Pandemic (COVID-19)	350	654	201	53	8
Other Events or Exposures	14	20	19	31	15
Transportation Accidents	11	7	21	30	15
Assaults and Violent Acts	5	8	5	9	6
Fires and Explosions	1	2	1	1	0
Total for Fiscal Year	1,444	1,800	1,535	1,400	1,183

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, and similar conditions.
2. The second most frequent category was contact with objects and equipment, which can include struck-by or struck-against, caught-in, or pinched events, resulting in abrasions, lacerations, and fractures.
3. The third highest category was worker injury due to falls on the same level or from ladders, scaffolds, and similar elevations, which can result in fractures, sprains or strains, and contusions.
4. Total number of cases reported are declining after FY 2022.

Conclusion

The CAIRS database provides a centralized data repository enabling users to conduct diverse analyses, such as developing trends and identifying potential hazards. Analysis of injury and illness data is a departmental requirement but, more importantly, it is a widely recognized methodology for uncovering workplace safety and health issues, monitoring their resolution, and driving safety performance improvement and resilient mission execution.



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Questions regarding the Operating Experience program or OpEx documents, in general, can be directed to oec@hq.doe.gov or Maria Dikeakos at (631) 574-0220 or Maria.Dikeakos@hq.doe.gov.

Operating Experience Summary

Operating Experience Summaries are informative operating experience-based articles published by the Office of Environment, Health, Safety, and Security (EHSS) and distributed across the DOE complex through the DOE Corporate Operating Experience Program to promote safety and mission success through the open exchange of valuable learning experiences, good practices, and performance summaries.