

Occupational Health

The occupational health indicators on the [Health Data Explorer](#) are a set of surveillance measures used to monitor the health of the Louisiana workforce. Each measure highlights a risk factor or category of injury and illness, usually expressed as the number of occurrences among the relevant population. These measures help to track occurrences over time, compare individual states and the nation, and highlight areas that may need additional exploration. The occupational health indicators were created through a joint effort between the Council of State and Territorial Epidemiologists (CSTE) and the National Institute of Occupational Safety and Health (NIOSH).

Definition

For a more detailed description of these measures, please see the [Glossary of Terms](#).

Data Sources

- [Section of Environmental Epidemiology & Toxicology, Occupational Health Program](#)
- [U.S. Census Bureau](#)

The Louisiana Department of Health (LDH) Environmental Public Health Tracking Program ('LDH Tracking') processes occupational health data to provide to the US Centers for Disease Control and Prevention (CDC) Tracking Program, through a Cooperative Agreement.

Vintage: The latest dataset available from LDH Tracking as of August 2024:

- Occupational Health Data by count, rate, percent and currency (See below): data years **2008-2021**

Data Measure(s)

Employment Profile

- Number of employed persons
- Percentage of civilian population by demographics, employment status and number of hours worked, industry and occupation, and union affiliation

High-Risk Mortality Industries and Occupations

- Number and Percent of employed persons in high mortality risk occupations and industries

High-Risk Morbidity Industries and Occupations

- Number and percent of employed persons in high morbidity risk industries and occupations

Lead Poisonings

- Number of prevalent and incident cases and prevalent and incident rates of elevated blood lead levels of greater than or equal to 5 mcg/dL, 10 mcg/dL, 25 mcg/dL, and 40 mcg/dL

Pesticide Poisonings

- Number and incident rates of reported work-related pesticide poisoning cases

Pneumoconiosis Deaths

- Number, Crude Rate, and Age-Adjusted Rate of pneumoconiosis deaths (Total, Asbestosis, Coal Worker's, Silicosis, & Other & Unspecified)

Amputations

- Number and incident rates of amputations involving days away from work

Pneumoconiosis Hospitalizations

- Number, crude rate, and age-adjusted rate of pneumoconiosis hospitalizations (Total, Asbestosis, Coal Worker's, Silicosis, & Other & Unspecified)

Burn Hospitalizations

- Number and crude rate of work-related burn hospitalizations

Work-Related Injuries/Illnesses with Days Away from Work

- Number and incident rates of work-related injuries/illnesses (all cases, cases involving days away from work, cases involving more than 10 days away from work)

Fatal Work-Related Injuries

- Number and crude rate of work-related fatalities

Malignant Mesothelioma

- Number, crude rate, and age-adjusted rate of mesothelioma cases

Musculoskeletal Disorders (MSD)

- Number and incidence rates of MSDs (all cases, neck, shoulders, and upper extremities, back, & carpal tunnel)

Non-Fatal Injuries/Illnesses

- Number and incidence rates of work-related injuries/illnesses

Work-Related Hospitalizations

- Number and crude rate of work-related hospitalizations
- Number and crude rate of severe, traumatic injury work-related hospitalizations

Work-Related Low Back Disorder Hospitalizations

- Number and crude rate of work-related low back disorder hospitalizations (all cases & surgical cases)

Occupational Health and Safety Administration (OSHA) Inspections

- Number and percent of employees under OSHA jurisdiction whose work areas were inspected
- Number of establishments inspected by Federal/State OSHA
- Number of establishments under OSHA jurisdiction and percent of all establishments inspected

Work-Related Asthma

- Number and percent of ever-employed adults with current asthma reporting work exposure

Heat-Related Illness

- Number and crude rate of occupational heat-related emergency department (ED) visits

Hospitalizations for/with Occupational Eye Injuries

- Number and crude rate of hospitalizations for/with occupational eye injuries

Workers' Compensation Claims

- Number and incident rates of carpal tunnel claims filed with workers' compensation with lost work-time
- Number and incident rates of amputation claims filed with workers' compensation with lost work-time

Workers Compensation Benefits

- Average amount of workers' compensation benefits paid per covered worker (\$)
- Total amount of workers' compensation benefits paid (\$)

Explore Data

The LDH Health Data Explorer (<http://ldh.la.gov/tracking>) is an online query tool which allows health, environmental hazard, exposure and population data to be explored and viewed side-by-side in tables, charts, and maps. Data can be viewed, printed and downloaded for further analysis.

To *Explore Data* on the query tool:

Step 1: Select Criteria

Category: **Health Outcomes**

Topic: **Occupational Health**

Focus: **Employment** or Focus: **Heavy Metals** or Focus: **Injuries/Illnesses** or Focus: **Mortality** or Focus: **OSHA Enforcement Activities** or Focus: **Workers' Compensation**

Keeping Workers Safe and Healthy

Occupational health plays a crucial role in maintaining and enhancing personal well-being by ensuring that the workplace environment supports and protects employees' physical and mental health.

By implementing effective safety protocols, ergonomic practices, and health screenings, organizations can reduce the risk of work-related injuries and illnesses. This proactive approach not only safeguards workers from hazards but also fosters a healthier work-life balance. Employees benefit from a supportive work environment that encourages healthy habits and reduces stress, leading to improved overall health and job satisfaction. In essence, prioritizing occupational health is an investment in both individual well-being and organizational productivity.

Occupational Health and the Environment

Occupational health is intricately connected to environmental factors, as the conditions in which people work can significantly impact their well-being and overall health. Environmental factors such as air quality, noise levels, temperature extremes, and exposure to hazardous substances play a critical role in determining the safety and health of workers. For instance, poor air quality in a workplace can lead to respiratory issues, while excessive noise can cause hearing loss or stress. Similarly, exposure to toxic chemicals or extreme temperatures can result in both acute and chronic health conditions. Therefore, effective occupational health strategies must address these environmental factors, implementing measures to mitigate risks and enhance the working conditions to safeguard workers' health and productivity.

Data Methods

Data Privacy and Suppression. For these data, parishes with non-zero counts less than 6 and population less than 100,000 are flagged as suppressed. Suppressed values are not displayed. Suppression is a method of protecting health data confidentiality when small numbers are reported. Suppression rules, which vary by data source, generally restrict the extent to which health data can be shared publicly.

Primary and secondary suppression techniques are used to prevent someone's personal health information from being discoverable by the general public. On the LDH Health Data Explorer, numbers and rates that are suppressed are displayed as asterisks (*) and are cross-hatched in grey on graphs and maps. * indicates a suppressed value or a non-existent rate where the count = 0.

Only 'non-smoothed' data values are included in this dataset. Smoothed rates or measures are available by the [CDC Tracking Program](#) and currently include stratifications for age group and gender. They can be used to identify patterns or trends across a state or group of counties (parishes).

Data Limitations and Important Considerations

The following data limitations may exist for this dataset:

- a. Data are generally updated as available. There may be a one to two year lag period before data are available from the data owner.
- b. Fluctuations in rates from year to year between parishes that do not reflect a true change in health outcomes over time or geography may occur. These can complicate trend analysis. Distortion may occur from several identified quality controls related to data entry, transfer, or extraction; hospital closure or reorganization; incomplete hospital reporting; limitations of the geocode; major population shifts due to hurricanes; and other possible factors. Rate fluctuations have been found to impact both populous and rural parishes. Work is ongoing to identify and improve both the data source(s) and processing steps along the workflow.
- c. Numbers and rates may differ slightly from those contained in other publications. These differences may be due to file updates, differences in calculating rates, diagnostic techniques reported, NCDMs standards for processing, and updates in population estimates.
- d. Practice patterns and payment mechanisms may affect diagnostic coding and decisions by health care providers to hospitalize patients.
- e. Veterans Affairs, Indian Health Services and institutionalized (e.g. prison) population records are also not included in these data.

- f. Records for persons living in Louisiana may not be included if the hospitalization occurred out of state.
- g. Patients may be exposed to environmental triggers in multiple locations, but hospital discharge geographic information is limited to patient residence and hospital location.
- h. Differences in rates by area may be due to different socio-demographic characteristics and associated behaviors. When rates across geographic areas are compared, many non-environmental factors, such as access to medical care, personal behaviors, health status and diet can affect the likelihood of a person being hospitalized for asthma. Differences in rates by time or area may reflect differences or changes in diagnostic techniques and criteria in the coding of asthma.
- i. Differences in counts and rates in years prior to 2015 (ICD-9-CM) compared with 2015 (ICD-9CM and ICD-10-CM) and subsequent years (ICD-10-CM) could be a result of a coding change and not an actual difference in the number of events (CDC, 2023). The COVID event of 2020-2021 should be considered when interpreting data from this time period.
- j. These Occupational Health Indicators (OHIs) describe the health status of the working population. Below is a list with links to all of the data sources used to calculate the indicators.

"OHIs Definition & Calculation Guidance manual, which also contains the limitations associated with each of the data sources used. <http://www.cste.org/page/ohi-home>"

Data sources used in the calculation of Occupational Health Indicators (OHIs) include:

- a. Geographic Profiles of Employment and Unemployment
<https://www.bls.gov/opub/geographic-profile/home.htm>
- b. Survey of Occupational Injuries and Illnesses (SOII)
<https://www.bls.gov/iif/oshstate.htm>
- c. Census of Fatal Occupational Injuries (CFOI)
<https://www.bls.gov/iif/oshstate.htm>
- d. Covered Employers and Wages (QCEW)
<http://www.bls.gov/cew/data.htm>
- e. Healthcare Safety Network (NHSN)
<https://www.cdc.gov/nhsn/datastat/index.html>
- f. County Business Patterns (CBP)
<https://www.census.gov/programs-surveys/cbp.html>
- g. data.census.gov (formerly American FactFinder)
<https://data.census.gov/cedsci/>

- h. Year 2000 U.S. Standard population
<http://www.cdc.gov/nchs/data/statnt/statnt20.pdf>
- i. National Academy of Social Insurance (NASI)
<https://www.nasi.org/research/workers-compensation>
- j. Poison Control Center & OSHA Annual Reports (provided by NIOSH)

State Level Data Sources:

- k. Inpatient Hospital Discharge
- l. Emergency Discharge Data
- m. Blood Lead Laboratory Reports
- n. Tumor Registry (LSU Health New Orleans School of Public Health)
- o. Death Certificates (LDH/Vital Records)
- p. Workers' Compensation (WC; Louisiana Office of Workers' Compensation Administration)
- q. Poison Center (LSU Shreveport Health)

Data Re-release

This is a public dataset which can be freely shared. Personally identifiable health information has been removed. Please refer to the Data Methods section of these metadata from more information.

Data Citations

Please cite the US CDC, LDH Environmental Public Health Tracking Program Cooperative Agreement NUE1EH001490, and any **data source(s)** listed on Page 1 when re-sharing or applying these data in analyses or publications.

Disclaimer

Data are intended to spur further research and should be used only as a starting point to understanding how the environment and other contributing factors may be connected to disease. Datasets presented on the LDH Health Data Explorer site are intended to answer some basic questions, but should ultimately lead to further inquiry and more detailed study.

Data limitations should be noted when conducting exploratory ecological studies with these data. Limitations may include data gaps, reporting discrepancies (for example, a disruption of reporting or instrument recording) and insufficient data are all potentially confounding factors. There are numerous additional factors which may contribute to disease onset. These include genetics, access to health care,

existing health conditions, medicines, other chemical substances we come into contact with or ingest, nutrition, route and duration of exposure, level of activity, level of stress, and others.

Responsible use of this data requires exercising caution when drawing conclusions based solely on views of the limited available data. Any perceived relationship, trend, or pattern apparent in the data should not be interpreted to imply causation; may in fact be unrelated; and should be regarded as preliminary, and potentially erroneous, until more in-depth study and if applicable, statistical evaluation, can be applied. The LDH Bureau of Health Informatics and Environmental Public Health Tracking Program cannot guarantee the completeness of the information contained in these datasets and expressly disclaim liability for errors and omissions in their content.

Additional Information

Please visit the following links for more information:

- [Geographic Profiles of Employment and Unemployment](#)
- [Survey of Occupational Injuries and Illnesses \(SOII\)](#)
- [Census of Fatal Occupational Injuries \(CFOI\)](#)
- [Covered Employers and Wages \(QCEW\)](#)
- [Healthcare Safety Network \(NHSN\)](#)
- [County Business Patterns \(CBP\)](#)
- [data.census.gov \(formerly American FactFinder\)](#)
- [Year 2000 U.S. Standard Population](#)
- [National Academy of Social Insurance \(NASI\)](#)
- Poison Control Center & OSHA Annual Reports (provided by NIOSH)

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Questions?

- Email: healthdata@la.gov
- Website: <http://ldh.la.gov/tracking>
- Toll free Phone: 1-888-293-7020