

EMPLOYEE, COMMERCIAL HAULER, AND SELF-HAULER SAFETY AT LANDFILLS



SWANA is well known and internationally recognized for its commitment to safety in the solid waste industry. As often stated by SWANA's CEO David Biderman, "Nothing we do is more important."

The primary focus of SWANA's safety program has been on solid waste collection, since this is the waste management activity that historically has had the most fatalities. The SWANA Applied Research Foundation's (ARF) Disposal Group recently identified the need for research on innovations in employee and customer safety at municipal solid waste landfills, which is the focus of this report.

The report presents Bureau of Labor Statistics (BLS) worker fatality data for solid waste landfill employees for the years 2008 through 2018 for solid waste landfill employees. These data indicate that there has been an average of five landfill worker fatalities per year over the last 11 years. An analysis of data from the BLS conducted by SWANA indicated that the majority of the fatal events at solid waste landfills were related to transportation incidents involving accidents among hauler vehicles and/or hauler vehicles and landfill equipment.

The illness and injury rates for solid waste landfills over the same period averaged 5.1 cases per hundred full-time employees, or FTEs. This average rate is lower than the average rate recorded for solid waste collection services (6.1) and material recovery facilities (5.3).

As indicated in the following table, the causes of the injuries and illnesses reported to BLS were found to be overexertion and bodily reaction; contact with objects and equipment; falls, slips, and trips; transportation incidents; and exposure to harmful substances or environments.

Non-fatal occupational Injuries and Illnesses at Solid Waste Landfills – 2011–2017	
Event or Exposure	Percent
Overexertion and bodily reaction	42%
Contact with object, equipment	27%
Falls, slips, trips	16%
Transportation incidents	9%
Exposure to harmful substances or environments	6%
Total	100%

Interestingly, overexertion and bodily reaction injuries were found to represent 42% of the illness/injury case load. This might suggest the need for an increased focus on proper hydration, breaks, and employee fitness. On the other hand, exposure to harmful substances or environments represents only 6% of the injury/illness case load.

A review of the literature as well as current landfill safety plans and policies helped identify five key strategies that should be considered by landfill managers:

- Keep landfill equipment and hauler vehicles in separate areas at all times
- Require personal protection equipment (PPE) for haulers as well as employees
- Keep self-haul customers separate from commercial haulers
- Implement employee wellness programs
- Develop safety education programs and PPE requirements for self-haul customers and small independent haulers

These strategies apply to safety programs and best practices developed for both landfill employees and landfill haulers.

The full report presents 15 best practices that have been identified through this research effort to keep employees safe at landfills, as well as 12 best practices that landfill managers should consider implementing at their facilities to improve hauler safety.

The research findings presented in this report underscore the need to include haulers as well as employees in the design and implementation of landfill safety programs. Landfill safety programs and practices must be designed to protect and enhance the safety of both haulers as well as employees at landfills.

It is the hope of the SWANA Applied Research Foundation that the publication of this report will contribute to and enhance the quality and effectiveness of the SWANA Safety Program in general and the safety practices implemented at landfills across North America.

The full report, *Employee, Commercial Hauler and Self-Hauler Safety at Landfills*, is currently only available to SWANA ARF subscribers. SWANA members receive free access to ARF industry reports one year after publication.