

# Safety and the Solid Waste Industry **AN IMPROVING PICTURE**



National Solid Wastes Management Association

4301 CONNECTICUT AVENUE, NW • SUITE 300

WASHINGTON, DC 20008

800 424 2869 • [www.nswma.org](http://www.nswma.org)

## SUMMARY

The solid waste industry places the highest emphasis on employee and community safety. Solid waste companies recognize the relationship between safe operations and maintaining a productive and healthy workforce, providing a responsible presence to customers and the communities in which they operate, and controlling the cost of waste services. Despite the many potential hazards associated with refuse collection, processing and disposal, solid waste companies continue to make great strides towards becoming safer workplaces.

This paper reviews industry-specific safety data, initiatives being taken to improve safety, describes the positive impact these initiatives are having, and addresses the challenges facing the industry as it seeks to further reduce fatalities, injuries and accidents.

## SAFETY IN THE SOLID WASTE INDUSTRY

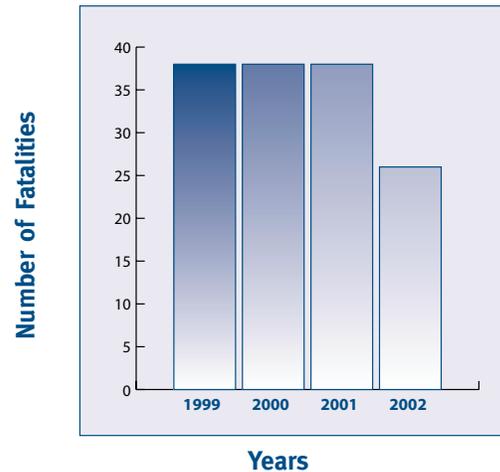
The collection, processing and disposal of solid waste potentially exposes solid waste employees and others to hazards. Collecting solid waste and recyclables usually involves driving and riding on busy streets and highways, getting into and out of a truck hundreds of times each day, lifting heavy bags and containers, and avoiding traffic. Garbage collectors also have to watch out for potentially harmful substances in the trash and recycling containers, such as broken glass, pool chemicals, needles and snakes.<sup>1</sup> Sorting recyclables often requires employees to stand for hours on a sorting line and divert paper, plastic, glass and other materials for further processing. Large compactors and balers are used to crush and bale recyclable materials. Collection vehicles frequently enter transfer stations or recycling facilities to dump their loads, often in close proximity to other vehicles, forklifts and facility employees. At a landfill, vehicles unload while bulldozers compact the material, often close to each other as well as landfill employees.

Most solid waste employees work outside where workplace conditions can rarely be controlled, such as in bad weather, on slippery surfaces or on busy streets, and where customers determine the amount, weight and location of the trash to be collected. As a result,

**Safety in the solid waste industry has always been a basic priority. Over time, it has become a core value.**

## CHART 1

Fatalities in the Solid Waste Industry



US Dept. of Labor, Bureau of Labor Statistics  
(Most recent data available)

maintaining a safe workplace for employees in the solid waste industry is an ongoing and difficult challenge.

Language and cultural barriers must be overcome to ensure proper training to reduce fatalities, injuries and accidents. For many solid waste employees, English is a second language, and care must be taken so they fully understand the safety training they are receiving. Also, collection employees are predominantly male, and may not be willing to seek assistance from other employees when lifting heavy waste containers or fixing jammed equipment.

Complicating matters further, a wide variety of collection vehicles are used in the industry. Although some vehicles have automated “tippers” or “arms,” the majority of vehicles used in residential solid waste collection require employees to lift bags and waste containers and toss them into the back of the truck.<sup>2</sup> These containers often weigh more than 50 pounds, and some of the items placed at the curb by customers (sofas, refrigerators) weigh over 100 pounds.

Although each waste company has different types of accidents and injuries, some general overlap exists. Historically, the majority of fatalities in the solid waste industry are vehicle-related.<sup>3</sup> Many vehicle-related fatalities involve workers falling off or being hit by a collection vehicle.<sup>4</sup> Some fatalities result when the driver of a car hits an employee working near a waste collection vehicle.<sup>5</sup>

Safety managers and supervisors strive to eliminate fatalities, reduce injuries and property damage, and minimize vehicle accidents. On a regular basis, safety managers examine their Occupational Health and Safety Administration (OSHA) logs, incident reports and workers compensation data to identify types of vehicles or operations with elevated accident rates, and develop ways to address them. New employees receive safety training, and most companies hold weekly or monthly safety meetings and have safety committees to remind employees of the importance of safe operations. Employees often need frequent training to ensure they use safe lifting techniques, for



The elevation of safety as a core value is due, in part, to a growing industry desire to be leaders in social responsibility. In addition, there have been recent

operational changes in the industry. During much of the 1990s, many companies were focused on growth and acquisitions. In recent years, the waste industry has experienced remarkable stability, as the consolidation waves of the 1990's left larger companies with thousands of vehicles, employees and facilities to integrate and manage. Robust competition is forcing most companies to look for ways to reduce costs. As a result, reducing fatalities, injuries and accidents – and the substantial expenses associated with them – has become a more important focus at all levels at larger companies, and at smaller companies as well. Improving safety performance can reduce insurance, medical, liability and other costs, improve employee morale and decrease turnover. Also, some commercial and industrial customers are using safety as a basis for deciding which company to hire. The bottom line is that safety is both the right thing to do, and makes good business sense.

Improvements in equipment also have helped reduce fatalities, injuries and accidents. Waste equipment manufacturers design their products to reduce known safety hazards. The increased use of automated collection vehicles, where practical, means some employees are no longer required to jump on and off or climb on a truck hundreds of times each day, reducing the number of “slip and fall” accidents and leg/ankle injuries. Better gloves and shoes and the increased use of high-visibility vests and safety eyeglasses also has contributed to declining fatality, injury and accident rates.



example. Similarly, drivers sometimes need reminders not to drive too fast, follow too close, and to make sure no one is behind a truck before backing up. Through constant training, unsafe practices are and can be minimized. Recognition and bonuses are often given to employees and facilities with outstanding safety records.

## SAFETY IS A CORE VALUE

Safety in the solid waste industry has always been a basic priority. Over time, however, it has become a core value. Indeed, the solid waste industry has significantly improved its overall safety record in recent years.<sup>6</sup> During fiscal year 2002, solid waste employers suffered 26 fatalities, a 30 percent decrease from the previous year, and well below the industry average during the 1990's.<sup>7</sup> Between 1998 and 2002, the injury and illness rate calculated by the federal OSHA for solid waste companies declined from 11 to 7.3 per 100 full-time employees, more than a 35 percent decline.<sup>8</sup> OSHA penalties paid by solid waste companies have declined from over \$700,000 in 1998 to about \$233,000 in 2003.<sup>9</sup>

## NSWMA AND COMPANY PROGRAMS AND INITIATIVES

The National Solid Wastes Management Association (NSWMA) and many of its members have responded through new programs and initiatives. NSWMA developed a training video, funded by OSHA, and available in Spanish, that focuses on the hazards posed by residential collection.<sup>10</sup> NSWMA updated its refuse vehicle driver training education program, *Coaching the Refuse Driver II*, and for the first time, made it available in Spanish.<sup>11</sup> NSWMA also has developed a comprehensive Manual of Recommended Safety Practices to help companies address the wide range of safety issues facing the industry.<sup>12</sup> NSWMA holds regional and on-line safety seminars and empha-

sizes safety training at its annual trade show, Waste Expo.

Many of NSWMA's members have made safety a core value of their company's business operations. Waste Management Inc. (WM) has embarked on a "Mission to Zero," with a goal of no accidents. WM has reported substantial declines in fatalities and lost workdays as a result. Allied Waste Industries has a risk-based program focused on changing employee behavior that has achieved a 60 percent reduction in accident frequency. Republic Services, Inc. has partnered with an outside safety vendor that has helped the company reduce accidents and develop a positive safety culture.

Smaller companies are also emphasizing safety. After two separate accidents less than a week apart (one involving a fatality) in which rushing suburban drivers near Cincinnati hit a collection employee, Rumpke developed a national safety campaign, funded by McNeilus, a refuse truck manufacturer, urging drivers to "Slow Down to Get Around" refuse workers.<sup>13</sup> Many other companies and local governments have joined this campaign. At Paine's, Inc. in Connecticut, a focus on reducing strains and sprains has led to a more than 60 percent reduction in these types of injuries. At Western Disposal Services in Colorado, increased buy-in from managers on safety has helped reduce lost workdays by more than half.

## SAFETY – KEEP RAISING THE BAR

Although many solid waste companies have made significant progress in reducing the number of fatalities and injuries, there is still work to be done. The industry continues to have a fatality rate and an injury rate that is above the national average for all employers. While this is partially a function of the physically challenging work performed by solid waste employees and the work environment, the industry is committed to improving its safety record.

## We want safety to be part of our DNA.

To help companies improve their safety programs, the Waste Equipment Technology Association (WASTEC) coordinates the development of voluntary safety standards for waste equipment, including collection vehicles, containers, compactors, and balers.<sup>14</sup> These standards cover everything from the maximum allowable

## NSWMA Promotes Safety:

- ◆ Coaching the Refuse Driver II
- ◆ Be Safe, Be Proud - Video
- ◆ "Slow Down to Get Around" Campaign
- ◆ Manual of Recommended Safety Practices
- ◆ Education Programs
- ◆ Drivers of the Year Safety Awards

speed when an employee is standing on a riding step of a moving garbage truck to the number of bales that can be stacked at a transfer station or recycling facility. By incorporating safety even further into the design and use of waste equipment, a higher number of fatalities, injuries and accidents can be prevented.

Most importantly, the continued elevation of safety as a core company value, from the CEO on down, must be continuously emphasized and communicated. As the safety manager at one company puts it, "we want safety to be part of our DNA." This message needs to be expressed not only in meetings, but also through additional and better training, increased route observation, better maintenance of equipment, proper incentives, and the purchase and use of safety gear. By making safety part of the industry's DNA, solid waste companies are helping to ensure that the progress made over the past few years is not lost, to the benefit of their employees, customers, and the communities in which they operate.

<sup>1</sup> *Recycling Collector Bitten By Snake*, News-Press (Sept. 5, 2003).

<sup>2</sup> *Barriers to Automated Collection Systems*, MSW Management (2004) at 18. The use of automated collection vehicles is increasingly slowly in the U.S., with greatest use in the Sunbelt and suburban communities.

<sup>3</sup> *Preventing Workers Injuries and Deaths From Moving Refuse Collection Vehicles*, National Institute of Occupational Safety and Health (May 1997).

<sup>4</sup> *Ibid.*

<sup>5</sup> *Rumpke Workers Fear For Safety*, the Cincinnati Enquirer (Jan. 4, 2004).

<sup>6</sup> The solid waste industry is included within three different Standard Industrial Classification (SIC) codes used by the federal government. SIC Code 4953, refuse systems, contains the vast majority of the U.S. solid waste industry, and data generated by the federal government for 4953 is used throughout this paper. Some solid waste collection employees work for companies in SIC Code 4212 (local trucking), while many employees who work at recycling facilities are in SIC Code 5093.

<sup>7</sup> See chart 1

<sup>8</sup> U.S. Department of Labor, Occupational Health and Safety Administration ([www.osha.gov](http://www.osha.gov)). This data is for SIC Code 495. The overwhelming majority of employees in that code are in SIC Code 4953.

<sup>9</sup> *Ibid.*

<sup>10</sup> U.S. Department of Labor, Occupational Health and Safety Administration, *Be Safe Be Proud* (2004), available at [www.nswma.org](http://www.nswma.org).

<sup>11</sup> Available at [www.nswma.org](http://www.nswma.org).

<sup>12</sup> Available at [www.nswma.org](http://www.nswma.org).

<sup>13</sup> See [www.rumpke.com](http://www.rumpke.com)

<sup>14</sup> Additional information about WASTEC's ANSI Z245 standards is at [www.wastec.org](http://www.wastec.org).