



U.S. Department of Labor
Bureau of Labor Statistics

Serious Injuries Befell Workers Struck by Objects

Falling trees, machinery and vehicles that have slipped into gear, and building materials, such as steel beams and concrete blocks, are some of the objects that strike and kill workers each year. In the 1996 BLS nationwide Census of Fatal Occupational Injuries, 579 fatalities resulted from objects striking workers, amounting to almost a tenth of all fatal work injuries (6,112) counted that year. Since its implementation in 1992, this BLS census has reported between 550 and 600 deaths a year linked to workers being hit by objects, primarily those objects falling from elevations. The number of workers fatally struck by objects, in fact, reached a 5-year high of 402 in 1996.

The hazards of harvesting timber put workers at high risk of serious injury. Timber cutting and logging occupations alone accounted for a sixth of all workers fatally struck by objects (90 out of 579). Other occupational groupings associated with this type of fatality included: (See chart.)

- *Farmers*, struck while clearing trees or run over by tractors they had dismounted

- *Construction trades and laborers*, hit by falling or swinging lumber, beams, and concrete

- *Truckdriver and material moving equipment operators*, struck by heavy objects being loaded and unloaded

- *Mechanics*, pinned under falling vehicles and mobile equipment during repair

Lost-worktime incidents

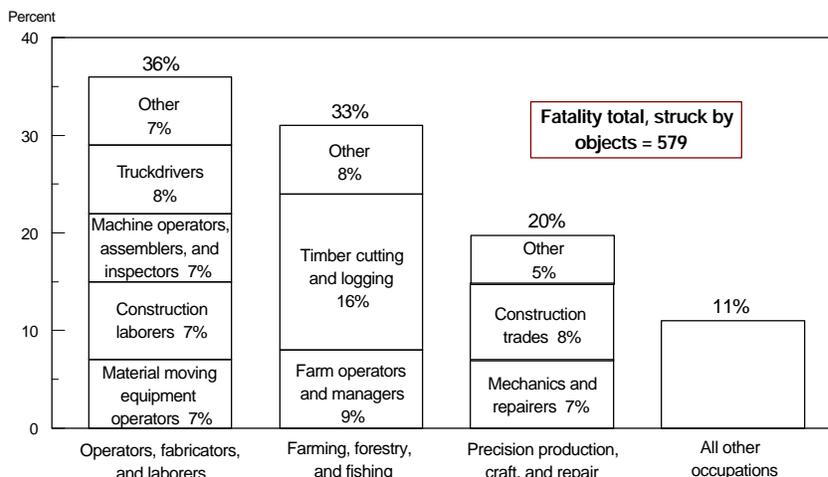
Besides profiling incidents of objects striking and killing workers, BLS also estimates the number of serious, nonfatal injuries associated with impacts of this type that require private industry workers to take off 1 or more workdays. In 1995 (the latest year for which such data are available), about 270,000 injuries resulted from workers being hit by object about an eighth of the total for all types of lost-worktime injuries.

Objects that struck and killed workers often differed from the primary sources striking and inflicting lost-worktime injuries. (See table.) Trees and logs, for example, accounted for three-tenths of all

fatalities resulting from objects striking workers, compared with 1 percent of all such cases involving days away from work. Machinery and vehicles were involved in an eighth each of all incidents where workers were fatally struck by objects but in only about half that proportion of incidents where workers survived.

The types of machinery and vehicles striking workers differed, as well. Material handling, agricultural, construction, logging, and mining machinery were most often cited in machinery-related fatalities, whereas refrigerators, sawing machinery, and hydraulic and other jacks topped the list of sources that produced lost-worktime injuries tied to objects striking workers. Trucks and tractors accounted for most of the vehicle-related fatalities, while carts, dollies, and handtrucks were responsible for most of

Occupations of workers fatally struck by objects, 1996



SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, National Census of Fatal Occupational Injuries, 1996

Fatal and disabling injuries to workers struck by objects, 1995-96

Source of injury ¹	Percent distribution		Median ⁴ workdays lost from disabling injury ⁵
	Fatal ² injuries (n = 579)	Disabling ³ injuries (n = 270,369)	
All primary sources of injury	100	100	4
Containers	8	16	4
Machinery	13	7	5
Material handling machinery	5	2	5
Parts and materials	22	25	4
Building materials—solid elements	12	11	4
Pipes, ducts, tubing	4	2	5
Structural metal materials	5	4	4
Wood, lumber	2	3	3
Machine, tool, and electric parts (e.g., saw blades)	4	3	4
Vehicle and mobile equipment parts (e.g., tires)	3	3	5
Persons, plants, animals, and minerals	31	4	4
Trees, logs	29	1	6
Structures and surfaces	4	6	5
Tools, instruments, and equipment	4	22	3
Vehicles	13	5	4
Trucks	6	1	4
Tractors	2	(5)	—
Other sources (e.g., bullets and metal chips)	3	7	2
All other and nonclassifiable sources	(5)	7	—

¹ Identifies the object that directly produced or inflicted the injury.
² Based on data from the 1996 BLS Census of Fatal Occupational Injuries, which covered all workers in the private and public sectors: Wage and salaried, self-employed, and family members.
³ Based on data from the 1995 BLS Survey of Occupational Injuries and Illnesses, which covered just wage and salaried workers in private industries, excluding farms with fewer than 11 employees and private households. Disabling injuries are those that

resulted in missed workdays.
⁴ Median workdays lost is the point at which half the injuries involved more, and half involved fewer days. Dashes indicate that medians were not computed.
⁵ Less than 0.5 percent.
 NOTE: Totals for major categories may include data for subcategories not shown separately. Because of rounding, percentages may not add to 100 percent.
 SOURCE: Bureau of Labor Statistics, U.S. Department of Labor.

the nonfatal injuries involving vehicles. In contrast to incidents involving trees, machinery, and vehicles, container incidents resulted in proportionately more nonfatal injuries (mostly from contact with boxes and crates) than fatal ones (commonly workers struck by falling hay and other bales or bundles).

Data for this report were derived from the BLS Census of Fatal Occupational Injuries and its companion Survey of Occupational Injuries and Illnesses. Struck by object includes unintentional injuries produced by forcible contact or impact between the injured person and the source of the injury when the motion producing the contact, rather than the person, is primarily that of the source of injury. Excluded from this classification are highway and other transportation incidents; violent acts; and other “impact” injuries, such as falls, striking against objects, and being caught in equipment.

For more information on various types of fatal and lost-worktime injuries, contact the Bureau of Labor Statistics, Office of Safety, Health and Working Conditions, Room 3180, 2 Massachusetts Avenue, NE., Washington DC 20212. Telephone: (202) 606-6175.

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