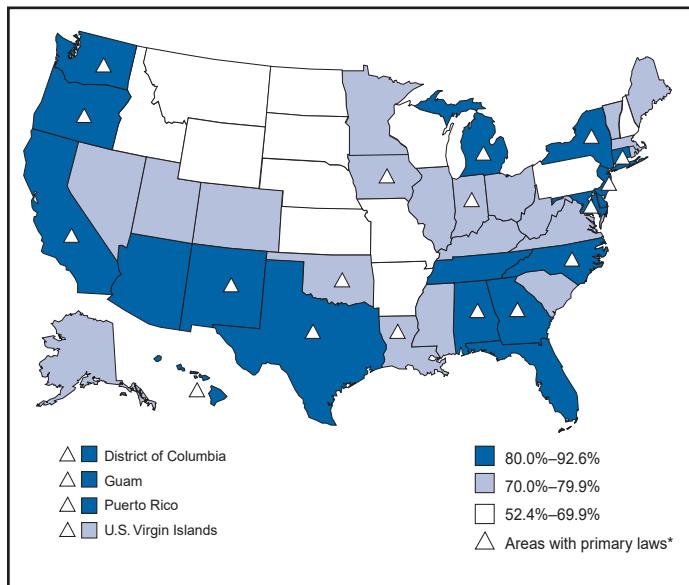


**FIGURE. Prevalence of always using a safety belt among persons aged ≥18 years, by area — Behavioral Risk Factor Surveillance System, United States, 2002**



\*Allow police to stop a motorist and issue a citation solely for being unbelted.

The Task Force recommends the use of primary laws because of strong evidence demonstrating that they have a greater impact than secondary laws (10). The Task Force also recommends high-visibility enforcement of the laws (e.g., safety-belt checkpoints) to further increase safety-belt use (10). The findings in this report indicate that differences in safety-belt use persist on the basis of the type of law in effect in the state. States should consider primary-enforcement safety-belt laws as an effective strategy to increase safety-belt use and decrease serious injuries and deaths associated with motor-vehicle crashes.

#### Acknowledgment

This report is based on data contributed by state BRFSS coordinators.

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## Work-Related Roadway Crashes — United States, 1992–2002

The risk for roadway crashes associated with driving or riding in a motor vehicle at work affects millions of persons in the United States. In 2001, approximately 4.2 million U.S. workers were classified as motor-vehicle operators (Bureau of Labor Statistics [BLS], unpublished data, 2001). Workers who use motor vehicles to perform their jobs include those who operate vehicles owned or leased by their employers and those who drive personal vehicles for work purposes. To characterize fatal occupational roadway crashes and identify workers at highest risk for fatality, CDC analyzed data for 1992–2002 from the Fatality Analysis Reporting System (FARS) of the National Highway Traffic Safety Administration and the Census of Fatal Occupational Injuries (CFOI) of BLS. This report summarizes the results of that analysis, which indicated that roadway crashes were the leading cause of occupational fatalities and that workers in transportation-related occupations were at highest risk. Effective strategies to prevent motor-vehicle-related crashes in the general public also can reduce work-related crashes. Employers should promote safe driving through vehicle selection and company policy.

FARS is a census of all police-reported traffic crashes resulting in a fatality within 30 days of a crash and relies on death certificates to ascertain work relationship. CFOI is a multi-source surveillance system for occupational fatalities and provides a more complete count of work-related crashes. Unlike FARS, CFOI includes information on the occupation and

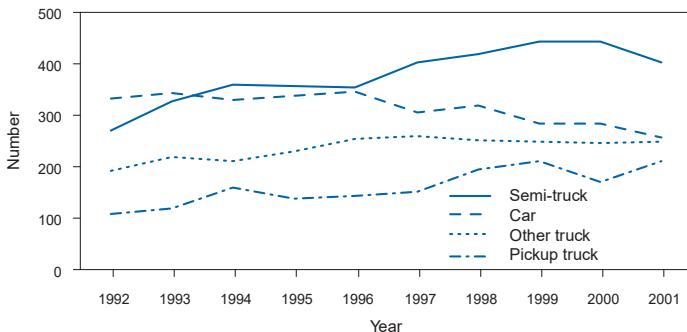
industry of the fatally injured worker; however, FARS provides more detailed information on crash circumstances and contributing factors. National death rates were calculated by using employment data from the BLS Current Population Survey, a household-sample survey of the civilian, noninstitutional population. Rates were calculated for persons aged  $\geq 15$  years.

During 1992–2001, a total of 13,337 civilians died in work-related roadway crashes in the United States (CFOI, unpublished data, 1992–2001). Rates remained stable during the decade, averaging approximately one fatality per 100,000 full-time equivalent (FTE) workers. Of the 13,337 fatalities, 11,931 (89%) were males, whose fatality rate was six times that of females (1.7 per 100,000 FTE workers versus 0.3). Rates increased markedly beginning at age 55 years: 1.6 deaths per 100,000 FTE among workers aged 55–64 years ( $n = 1,875$ ), 3.8 among those aged 65–74 years ( $n = 749$ ), and 6.4 among those aged  $\geq 75$  years ( $n = 241$ ).

During 1992–2001, fatal work-related roadway crashes most often involved collisions of vehicles (6,593 [49%]), followed by single-vehicle incidents that did not involve a collision with another vehicle or with a pedestrian (e.g., rollovers) (3,492 [26%]), and collisions between a vehicle and a stationary object (2,369 [18%]). Vehicles most commonly occupied by fatally injured workers were semi-trucks (3,780 [28%]), cars (3,140 [24%]), other and unspecified trucks (2,359 [18%]), and pickup trucks (1,607 [12%]). The annual number of deaths of pickup truck occupants increased 96%, and deaths of semi-truck occupants increased 49%. Deaths of car occupants decreased 33% (Figure).

The transportation, communications, and public utilities industries, which include commercial trucking, had the largest number and rate of roadway deaths (4,358 deaths; 4.6 per 100,000 FTE workers) (Table 1). The services industry accounted for the second highest number of deaths (1,884) but

**FIGURE.** Number of work-related roadway fatalities, by vehicle type and year — United States, 1992–2001\*



\*Excludes New York City.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

**TABLE 1.** Number and rate\* of work-related roadway fatalities, by industry — United States, 1992–2001†

Industry	No.	Rate
Transportation, communications, and public utilities	4,358	4.6
Services	1,884	0.5
Construction	1,403	1.7
Manufacturing	1,093	0.5
Public administration	1,038	1.8
Retail trade	1,029	0.5
Agriculture, forestry, and fishing	970	2.6
Wholesale trade	945	1.8
Finance, insurance, and real estate	253	0.3
Mining	241	3.4
Unclassified	123	—
<b>Total</b>	<b>13,337</b>	<b>1.1</b>

\* Per 100,000 full-time equivalent workers aged  $\geq 15$  years.

† Excludes New York City.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

had a low fatality rate (0.5). The construction; public administration; wholesale trade; agriculture, forestry, and fishing; and mining industries all had higher death rates than the overall rate for workers (1.1), ranging from 1.7 to 3.4 (Table 1).

Occupations in which the largest numbers of roadway deaths occurred were transportation and material moving (6,212 deaths; 11.1 per 100,000 FTE workers). These occupations accounted for 47% of all work-related roadway fatalities (Table 2). Truck drivers, who are classified within transportation and material-moving occupations, accounted for 5,375 deaths (17.6), the highest number and rate for any single occupation.

During 1997–2002, of 5,798 workers who died in work-related roadway crashes in 5,626 vehicles identified by FARS, 1,595 (28%) used safety belts, and 3,224 (56%) did not use safety belts or had none available; safety-belt use was unknown for 16% of fatalities. A total of 3,479 (62%) worker-occupied vehicles were registered to a business or government, 967

**TABLE 2.** Number and rate\* of work-related roadway fatalities, by occupation — United States, 1992–2001†

Occupation	No.	Rate
Transportation and material moving	6,212	11.1
Precision production, craft, and repair	1,178	0.8
Sales	975	0.7
Service	961	0.7
Farming, forestry, and fishing	914	2.5
Executive, administrative, and managerial	895	0.5
Professional specialty	724	0.4
Laborers	632	1.4
Clerical	376	0.2
Technicians and related support	248	0.6
Unclassified	96	—
<b>Total</b>	<b>13,337</b>	<b>1.1</b>

\* Per 100,000 full-time equivalent workers aged  $\geq 15$  years.

† Excludes New York City.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

(17%) were registered to the driver, and 679 (12%) were registered to a person other than the driver. Factors associated with workers' vehicles that contributed to fatal crashes included running off the road or failing to stay in the proper lane (2,599 [46%]), driving over the speed limit or too fast for conditions (1,284 [23%]), driver inattention (609 [11%]), and driver drowsiness (373 [7%]). In 470 (8%) crashes in which a worker was fatally injured, the driver of the worker's vehicle was determined to have been drinking (FARS, unpublished data, 1997–2002).

During 1992–2001, persons who died in crashes involving large trucks (gross vehicle weight rating: >10,000 pounds) were seven times as likely to be occupants of other vehicles as truck occupants. An average of 4,425 occupants of other vehicles involved in collisions with large trucks died each year, compared with 681 occupants of large trucks (1).

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**Editorial Note:** During 1992–2001, roadway crashes were the leading cause of occupational fatalities in the United States, accounting for an average of 1,300 civilian worker deaths each year (22% of all worker deaths). Despite overall declines in the number and rate of occupational fatalities from all causes, annual numbers of work-related roadway deaths increased during the decade, and rates showed little change.

Because occupational drivers operate vehicles in various work settings, they are not subject to uniform levels of oversight. Commercial vehicles that carry freight or passengers in interstate commerce are covered by the Federal Motor Carrier Safety Regulations, which address nearly all aspects of vehicle operation, including driver qualification and fitness for duty, vehicle inspection, periodic checks of driving records, use of retroreflective sheeting to make trailers more visible, securing of cargo, and hours of service of drivers (2). No equivalent body of regulations is applicable to workers who drive other types of company-owned or personal vehicles for work purposes. For those drivers, the content, implementation, and enforcement of workplace driver–safety policies is left primarily to the employer.

To reduce work-related roadway deaths, employers of workers who drive company or personal vehicles on the job should adhere to applicable safety regulations. Workplace driver–safety policies should be communicated, implemented, and enforced (Box). For worker drivers not covered by regulations, employers have an especially important role. Employers can demonstrate their commitment to occupational road safety by implementing company driver–safety policies and selecting safe vehicles.

Effective strategies to prevent roadway crashes among the general population also can reduce work-related roadway crashes. Information regarding effective community-based

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**BOX. Key elements of a workplace driver safety policy**

- Give a member of the management team responsibility and authority to set and enforce comprehensive driver safety policy.
- Require use of safety belts by all persons in the vehicle.
- Select vehicles that offer high levels of occupant protection.
- Maintain complete and accurate records of driving performance, including crash and injury data to help guide interventions at the company level.
- Set a policy stipulating that driving is a task that requires full attention; include instructions to avoid placing or taking cell phone calls while the vehicle is in operation.
- Set schedules that allow adequate time for workers to make deliveries or client visits without violating traffic laws or safety regulations.
- Ensure that workers are licensed and trained properly to operate the vehicle they are assigned.
- Implement a vehicle maintenance program that requires pre-trip inspections, immediate withdrawal from service of any vehicle with mechanical defects, and regularly scheduled withdrawal from service for comprehensive inspection and maintenance (3,4).

interventions to increase safety-belt use and reduce impaired driving is available from the Task Force on Community Preventive Services at <http://www.the-communityguide.org>. Health-care and safety professionals can 1) support collection and analysis of data on fatal and nonfatal crashes, 2) foster partnerships among diverse groups with interests in road safety, 3) evaluate the effectiveness of safety interventions (5), 4) promote safe driving practices among workers, and 5) educate the public about occupational road safety.

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## **Update: Cutaneous Leishmaniasis in U.S. Military Personnel — Southwest/Central Asia, 2002–2004**

Cutaneous leishmaniasis (CL) is a sand fly–borne parasitic infection. Preliminary data about cases of CL in military personnel deployed to three countries (Afghanistan, Iraq, and Kuwait) in Southwest/Central Asia have been published previously (1). During August 2002–February 2004, Department of Defense (DoD) staff identified 522 parasitologically confirmed cases of CL in military personnel. *Leishmania major* was the etiologic agent for all 176 cases for which species data, obtained by isoenzyme electrophoresis of cultured parasites, are available. This update focuses on the 361 cases (69% of 522) in patients whose demographic data were collected systematically under treatment protocols for therapy with the pentavalent antimonial compound sodium stibogluconate (Pentostam®; GlaxoSmithKline, United Kingdom) at Walter Reed Army Medical Center, District of Columbia (1). U.S. health-care providers should consider CL in persons with persistent skin lesions who were deployed to Southwest/Central Asia or who were in other areas where leishmaniasis is endemic.

Of the 361 patients with CL, 352 (98%) were male; 274 (76%) were non-Hispanic white, 54 (15%) were non-Hispanic black, and 25 (7%) were Hispanic. The median age was 25 years (range: 18–57 years). On the basis of the patients' deployment histories, all but four of the patients probably were infected in Iraq (Figure), notably in areas near the Iraq-Syria border (e.g., Tall Afar) and the Iraq-Iran border (e.g., Balad Ruz, Kanaquin, Mandali, and Tursaq). The patients represented multiple branches of the U.S. military, including the Active Force, Reserve, and National Guard components of the Army, Air Force, and Marine Corps; the majority of the patients were in the Active Force component of the Army. Self-reported dates of onset of skin lesions ranged from May 2002 to January 2004, with 274 (78% of 350) occurring during August–November 2003 (Figure), including 169 (48% of 350) during September–October.

DoD is implementing measures to decrease the risk for CL among U.S. military personnel in Southwest/Central Asia and to expedite detection and treatment of cases of CL. The measures include 1) improving living conditions for deployed personnel; 2) heightening awareness that leishmaniasis is endemic in this region (e.g., through publicity about cases of CL in U.S. military personnel and pre- and postdeployment briefings about leishmaniasis); 3) emphasizing the importance of deployed personnel using personal protective measures (e.g., using permethrin-treated clothing and bed nets or other barriers to sand flies, minimizing the amount of exposed skin, and applying insect repellent containing 30%–35% DEET