

Motor Vehicle Crash Deaths — United States and 28 Other High-Income Countries, 2015 and 2019

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Motor vehicle crashes are preventable, yet they continue to be a leading cause of death in the United States. An average of 36,791 crash deaths occurred each year (101 deaths each day) during 2015–2019 in the United States. To measure progress in reducing motor vehicle crash deaths, CDC calculated population-based, distance-based, and vehicle-based death rates in 2015 and 2019, as well as average rates and average percent changes from 2015 to 2019, for the United States and 28 other high-income countries for which data were available. In 2019, the population-based death rate in the United States (11.1 per 100,000 population; 36,355 deaths) was the highest among the 29 high-income countries and was 2.3 times the average rate of the 28 other high-income countries (4.8). The 2019 U.S. distance-based death rate (1.11 per 100 million vehicle miles traveled) was higher than the average rate among 20 other high-income countries (0.92), and the 2019 U.S. vehicle-based death rate (1.21 per 10,000 registered vehicles) was higher than the average rate among 27 other high-income countries (0.78). The population-based death rate in the United States increased 0.1% from 2015 to 2019, whereas the average change among 27 other high-income countries was –10.4%. Widespread implementation of proven strategies and the Safe System approach, which accounts for human error and works to protect everyone on the road, (1) can help reduce motor vehicle crash deaths in the United States.

CDC analyzed 2015 and 2019 data from the International Transport Forum's International Road Traffic and Accident Database (IRTAD),* which contains standardized and validated crash, population, exposure, and vehicle data regularly reported by participating countries. IRTAD data used in this report were

current as of February 2022; because of data lag, 2020 and 2021 data were not complete enough to be used. All high-income[†] countries that provided crash death data and had populations of >1 million persons were included. Countries that met these requirements but did not have data for all study variables or had trend breaks during the study period were included in analyses for which they had comparable data. Data from other

[†] <https://datatopics.worldbank.org/world-development-indicators/the-world-by-income-and-region.html>

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* <https://www.itf-oecd.org/irtad-road-safety-database> and <https://www.itf-oecd.org/irtad-publications>



sources were included for two countries: 2019 U.S. motor vehicle crash deaths came from the Fatality Analysis Reporting System[§] (2); crash deaths for the Netherlands came from the Institute for Road Safety Research (SWOV).[¶] Motor vehicle crash deaths included any road user who was killed in a crash (e.g., car occupants, motorcyclists, pedestrians, and bicyclists).

The number of crash deaths is reported for each country. The following three motor vehicle crash death rates and associated percent changes were calculated: 1) population-based (per 100,000 population), 2) distance-based (per 100 million vehicle miles traveled), and 3) vehicle-based (per 10,000 registered vehicles). CDC also calculated average rates and average percent changes (comparing 2015 and 2019) with

[§] In the United States, two national data systems monitor motor vehicle crash deaths: the National Highway Traffic Safety Administration's Fatality Analysis Reporting System (FARS) and the National Vital Statistics System (NVSS). FARS captures detailed information on motor vehicle crash deaths from a variety of sources, including death certificates, police reports, coroner/medical examiner reports, hospitals, and emergency medical services. NVSS, coordinated and managed by CDC's National Center for Health Statistics, contains information from death certificates filed in all 50 states and the District of Columbia. These two data systems operate independently, using different methods to collect and code data; therefore, each data system provides slightly different numbers of motor vehicle crash deaths (<https://www.tandfonline.com/doi/full/10.1080/15389588.2019.1576036>). FARS data are regularly reported to IRTAD for the United States. At the time of the analysis, final 2019 FARS motor vehicle crash death data were available but were not yet incorporated into IRTAD; therefore, 2019 motor vehicle crash death data were taken directly from FARS.

[¶] The Netherlands determines crash deaths by comparing and combining three data sources. <https://swov.nl/en/fact-sheet/road-deaths-netherlands>

and without the United States. This activity was reviewed by CDC and was conducted consistent with applicable federal law and CDC policy.**

The number of crash deaths from 2015 to 2019 decreased in 21 countries and increased in seven countries (Table 1). Percent changes ranged from a 27.5% decrease in South Korea to an 11.8% increase in Denmark; the average change was -8.1%. The United States experienced a 2.5% increase (from 35,484 deaths in 2015 to 36,355 deaths in 2019).

In 2019, crash deaths per 100,000 population for all 29 countries ranged from a low of 2.0 (Norway) to a high of 11.1 (United States). The U.S. rate was 2.3 times the average rate of the other countries (4.8). The population-based death rate decreased from 2015 to 2019 in 22 countries and increased in six countries (Figure). The United States experienced a nominal 0.1% increase from 2015 to 2019, whereas the average percent change for the 27 other high-income countries was -10.4%.

Among the 21 countries with vehicle-miles-traveled data for 2019, crash deaths per 100 million vehicle miles traveled ranged from 0.38 (Norway) to 2.05 (Hungary) (Table 2). The United States had the sixth-highest distance-based crash death rate (1.11), which was higher than the average rate among 20 other high-income countries (0.92). The United States experienced a 2.9% decrease from 2015 to 2019, whereas the

** 5 C.F.R. part 46.102(l)(2), 21 C.F.R. part 56; 42 U.S.C. Sect. 241(d); 5 U.S.C. Sect. 552a; 44 U.S.C. Sect. 3501 et seq.

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TABLE 1. Motor vehicle crash deaths and deaths per 100,000 population — 29 high-income countries, 2015 and 2019*

Country†	No. of MVC deaths			MVC deaths per 100,000 population**				
	2015	2019§,¶	% Change,** 2015 to 2019	Population, 2015§	Population, 2019§,¶	2015	2019	% Change, 2015 to 2019
United States	35,484	36,355	2.5	320,635,163	328,239,523	11.1	11.1	0.1
Chile††	NA	1,973	NA	18,006,407	18,726,548	NA	10.5	NA
Poland	2,938	2,909	-1.0	38,005,614	37,972,812	7.7	7.7	-0.9
New Zealand	318	352	10.7	4,596,700	4,979,200	6.9	7.1	2.2
Lithuania	239	186	-22.2	2,921,262	2,794,184	8.2	6.7	-18.6
South Korea	4,621	3,349	-27.5	51,014,947	51,709,098	9.1	6.5	-28.5
Greece	793	688	-13.2	10,858,018	10,724,599	7.3	6.4	-12.2
Hungary	648	602	-7.1	9,855,571	9,772,756	6.6	6.2	-6.3
Portugal	593	621	4.7	10,374,822	10,276,617	5.7	6.0	5.7
Czechia	735	617	-16.1	10,538,275	10,649,800	7.0	5.8	-16.9
Belgium	762	644	-15.5	11,237,274	11,455,519	6.8	5.6	-17.1
Italy	3,428	3,173	-7.4	60,795,612	60,359,546	5.6	5.3	-6.8
France	3,461	3,244	-6.3	64,300,821	64,812,052	5.4	5.0	-7.0
Slovenia	120	102	-15.0	2,062,874	2,080,908	5.8	4.9	-15.7
Austria	479	416	-13.2	8,584,926	8,858,775	5.6	4.7	-15.8
Canada	1,887	1,762	-6.6	35,826,748	37,593,384	5.3	4.7	-11.0
Australia	1,205	1,187	-1.5	23,815,995	25,365,571	5.1	4.7	-7.5
Israel	356	355	-0.3	8,463,400	9,054,100	4.2	3.9	-6.8
Netherlands	621	661	6.4	16,900,726	17,282,163	3.7	3.8	4.1
Finland	270	211	-21.9	5,471,753	5,517,919	4.9	3.8	-22.5
Spain	1,689	1,755	3.9	46,449,565	46,937,060	3.6	3.7	2.8
Germany	3,459	3,046	-11.9	81,197,537	83,019,213	4.3	3.7	-13.9
Denmark	178	199	11.8	5,659,715	5,806,081	3.1	3.4	9.0
Japan	4,885	3,920	-19.8	127,095,000	126,167,000	3.8	3.1	-19.2
Ireland	162	140	-13.6	4,677,627	4,904,240	3.5	2.9	-17.6
United Kingdom	1,804	1,808	0.2	65,110,034	66,796,807	2.8	2.7	-2.3
Switzerland	253	187	-26.1	8,237,666	8,544,527	3.1	2.2	-28.7
Sweden	259	221	-14.7	9,747,355	10,230,185	2.7	2.2	-18.7
Norway	117	108	-7.7	5,165,802	5,328,212	2.3	2.0	-10.5
Overall summary statistics								
Overall mean (with United States)	2,563	2,441	-8.1	36,814,042	37,446,841	5.4	5.0	-10.0
Overall median (with United States)	692	644	-7.6	10,858,018	10,724,599	5.3	4.7	-10.8
Minimum value (with United States)	117	102	-27.5	2,062,874	2,080,908	2.3	2.0	-28.7
Maximum value (with United States)	35,484	36,355	11.8	320,635,163	328,239,523	11.1	11.1	9.0
Overall mean (without United States)	1,344	1,230	-8.5	26,677,573	27,061,388	5.2	4.8	-10.4
Overall median (without United States)	648	633	-7.7	10,698,147	10,687,200	5.3	4.7	-11.0

Abbreviations: MVC = motor vehicle crash; NA = not applicable.

* All data come from the International Transport Forum's International Road Traffic and Accident Database, with two exceptions. The number of MVC deaths for the United States in 2019 comes from the Fatality Analysis Reporting System's Final File, released in March 2022. The numbers of crash deaths in 2015 and 2019 for the Netherlands are reported by the Institute for Road Safety Research (SWOV) and are determined by comparing and combining three data sources. <https://swov.nl/en/fact-sheet/road-deaths-netherlands>

† Countries are listed in descending order by 2019 MVC deaths per 100,000 population.

§ The following numbers were considered estimates: MVC deaths for Canada in 2019 and the population for Chile and New Zealand in 2015 and 2019.

¶ The following numbers were considered provisional: MVC deaths for Portugal and Australia in 2019 and the population for Australia in 2019.

** Percent changes and MVC deaths per 100,000 population were calculated based on numbers that were not rounded. However, after being calculated, they were rounded to the nearest 10th of a decimal point.

†† Chile changed its definition for MVC deaths starting in 2019, which creates a trend break. Data for MVC deaths in Chile in 2019 cannot be compared with previous years. Therefore, 2015 MVC deaths and any calculations that would be based on 2015 MVC deaths are not reported for Chile.

average percent change for the 16 other high-income countries was -14.2%.

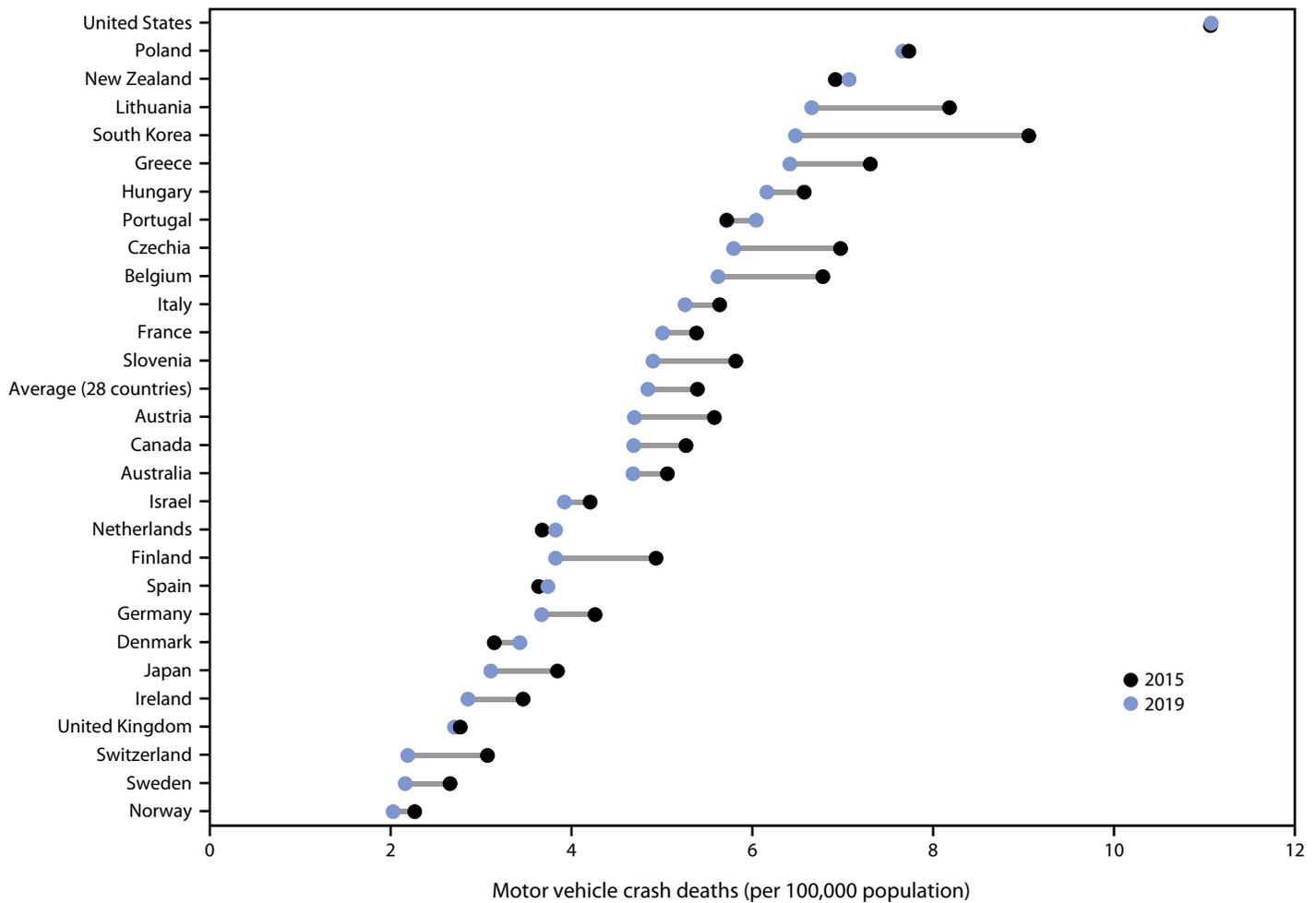
Among the 28 countries with registered vehicle information for 2019, crash deaths per 10,000 registered vehicles ranged from 0.27 (Norway) to 3.52 (Chile) (Table 2). The United States had the fourth-highest vehicle-based death rate (1.21), which was 1.6 times the average rate for the 27 other countries (0.78). Denmark was the only country with a higher rate in

2019 than in 2015. The United States experienced the second-smallest decrease (-3.7%).

Discussion

In 2019, 36,355 persons in the United States were killed in motor vehicle crashes. The United States accounted for 51.4% of the deaths in this study but only 30.2% of the population. The United States had the highest population-based death rate,

FIGURE. Motor vehicle crash deaths*[†] per 100,000 population — 28 high-income countries,^{§,¶} 2015 and 2019**



* The numbers of motor vehicle crash deaths for Canada in 2019 and the population for New Zealand in 2015 and 2019 were considered estimates.
[†] The numbers of motor vehicle crash deaths for Portugal and Australia in 2019 and the population for Australia in 2019 were considered provisional.
[§] Countries are listed in descending order by 2019 motor vehicle crash deaths per 100,000 population.
[¶] Chile changed its definition for motor vehicle crash deaths starting in 2019, which creates a trend break. Data for motor vehicle crash deaths in Chile in 2019 cannot be compared with previous years. Therefore, data for Chile are not included.
^{**} All data come from the International Transport Forum's International Road Traffic and Accident Database, with two exceptions. The number of motor vehicle crash deaths for the United States in 2019 (used to calculate the 2019 motor vehicle crash death rate in the United States) comes from the Fatality Analysis Reporting System's Final File, released in March 2022. The numbers of crash deaths in 2015 and 2019 (used to calculate the motor vehicle crash death rates for the Netherlands) are reported by the Institute for Road Safety Research (SWOV) and are determined by comparing and combining three data sources. <https://swov.nl/en/fact-sheet/road-deaths-netherlands>

the sixth-highest distance-based death rate, and the fourth-highest vehicle-based death rate among countries with data available. From 2015 to 2019, the U.S. population-based death rate increased nominally by 0.1%, whereas the average percent change of the other high-income countries was -10.4%. The United States experienced small decreases in distance-based and vehicle-based death rates, but these were well below the average decreases among other high-income countries.

If the United States were to achieve the average population-based crash death rate among all other high-income countries in this study (4.8), approximately 20,517 lives and

\$280.5 million in medical costs (in 2019 U.S. dollars) could be saved each year.^{††} However, recent data (2) indicate that U.S. motor vehicle crash deaths increased from 36,355 in 2019 to 38,824 in 2020 (a 6.8% increase), despite an 11.0% decrease in vehicle miles traveled. In addition, early estimates for 2021 indicate motor vehicle crash deaths further increased to 42,915. The number of motor vehicle crash deaths in 2021

^{††} Costs were calculated in 2019 U.S. dollars using CDC's Web-based Injury Statistics Query and Reporting System Cost of Injury Module. <https://wisqars.cdc.gov/cost/>

TABLE 2. Motor vehicle crash deaths per 100 million vehicle miles traveled and per 10,000 registered vehicles — selected high-income countries,* 2015 and 2019†

Country [§]	No. of MVC deaths, 2015	No. of MVC deaths, 2019 ^{¶,**}	Vehicle miles traveled (in billions), 2015 ^{††}	Vehicle miles traveled (in billions), 2019 ^{††,***,††}	MVC deaths ^{§§} per 100 million vehicle miles traveled			No. of registered vehicles, 2015 ^{¶¶}	No. of registered vehicles, 2019 ^{¶¶}	MVC deaths ^{§§} per 10,000 registered vehicles		
					2015	2019	% Change, ^{††}			2015	2019	% Change, ^{††}
United States	35,484	36,355	3,089.8	3,261.8	1.15	1.11	-2.9	281,312,446	299,267,114	1.26	1.21	-3.7
Chile ^{***}	NA	1,973	NA	NA	NA	NA	NA	4,647,062	5,599,733	NA	3.52	NA
Poland	2,938	2,909	138.0	155.1	2.13	1.88	-11.9	27,409,000	31,989,000	1.07	0.91	-15.2
New Zealand	318	352	26.9	30.4	1.18	1.16	-2.0	3,514,782	4,403,000	0.90	0.80	-11.6
Lithuania	239	186	NA	NA	NA	NA	NA	1,549,158	1,719,065	1.54	1.08	-29.9
South Korea	4,621	3,349	185.4	204.8	2.49	1.64	-34.4	23,853,034	26,990,456	1.94	1.24	-36.0
Greece	793	688	NA	NA	NA	NA	NA	9,518,000	9,822,000	0.83	0.70	-15.9
Hungary	648	602	NA	29.3	NA	2.05	NA	3,886,000	4,625,398	1.67	1.30	-21.9
Czechia	735	617	31.7	35.7	2.32	1.73	-25.5	6,499,000	7,643,000	1.13	0.81	-28.6
Belgium	762	644	62.3	NA	1.22	NA	NA	7,175,062	7,614,082	1.06	0.85	-20.4
Italy	3,428	3,173	NA	NA	NA	NA	NA	51,910,493	55,026,299	0.66	0.58	-12.7
France	3,461	3,244	375.2	382.4	0.92	0.85	-8.0	46,493,161	48,298,911	0.74	0.67	-9.8
Slovenia ^{†††}	120	102	NA	14.0	NA	0.73	NA	1,372,751	1,515,329	0.87	0.67	-23.0
Austria	479	416	47.9	52.8	1.00	0.79	-21.3	6,466,166	6,895,596	0.74	0.60	-18.6
Canada	1,887	1,762	227.3	248.3	0.83	0.71	-14.5	23,923,806	25,422,635	0.79	0.69	-12.1
Australia	1,205	1,187	154.4	162.8	0.78	0.73	-6.6	18,007,767	19,505,241	0.67	0.61	-9.1
Israel	356	355	34.1	39.3	1.05	0.90	-13.5	3,091,636	3,600,693	1.15	0.99	-14.4
Netherlands	621	661	80.5	85.5	0.77	0.77	0.2	10,775,799	11,553,132	0.58	0.57	-0.7
Finland ^{†††}	270	211	NA	31.3	NA	0.67	NA	4,429,000	4,878,000	0.61	0.43	-29.0
Spain	1,689	1,755	NA	NA	NA	NA	NA	33,412,894	36,343,283	0.51	0.48	-4.5
Germany ^{†††}	3,459	3,046	NA	469.1	NA	0.65	NA	53,716,000	57,305,201	0.64	0.53	-17.5
Denmark	178	199	32.4	34.2	0.55	0.58	5.9	3,029,000	3,290,000	0.59	0.60	2.9
Japan	4,885	3,920	454.2	462.7	1.08	0.85	-21.2	91,315,870	91,457,940	0.53	0.43	-19.9
Ireland	162	140	28.6	29.2	0.57	0.48	-15.4	2,570,294	2,805,839	0.63	0.50	-20.8
United Kingdom	1,804	1,808	NA	NA	NA	NA	NA	37,570,487	39,890,719	0.48	0.45	-5.6
Switzerland	253	187	40.6	43.1	0.62	0.43	-30.3	6,046,934	6,371,545	0.42	0.29	-29.9
Sweden	259	221	50.2	52.0	0.52	0.42	-17.7	6,021,000	6,363,944	0.43	0.35	-19.3
Norway	117	108	27.5	28.7	0.43	0.38	-11.6	3,812,144	4,049,449	0.31	0.27	-13.1
Overall summary statistics												
Overall mean (with United States)	2,636	2,506	282.6	278.7	1.09	0.93	-13.6	27,618,884	29,437,379	0.84	0.79	-16.3
Overall median (with United States)	735	653	56.2	52.0	0.96	0.77	-13.5	6,837,031	7,628,541	0.74	0.64	-15.9
Minimum value (with United States)	117	102	26.9	14.0	0.43	0.38	-34.4	1,372,751	1,515,329	0.31	0.27	-36.0
Maximum value (with United States)	35,484	36,355	3,089.8	3,261.8	2.49	2.05	5.9	281,312,446	299,267,114	1.94	3.52	2.9
Overall mean (without United States)	1,373	1,252	117.5	129.5	1.09	0.92	-14.2	18,222,826	19,443,685	0.83	0.78	-16.8
Overall median (without United States)	692	644	50.2	47.5	0.92	0.75	-14.0	6,499,000	7,614,082	0.70	0.61	-16.7

Abbreviations: MVC = motor vehicle crash; NA = not applicable.

* Portugal is not included because there were no data available for Portugal's vehicle miles traveled or for registered vehicles.

† All data come from the International Transport Forum's International Road Traffic and Accident Database, with two exceptions. The number of MVC deaths for the United States in 2019 comes from the Fatality Analysis Reporting System's Final File, released in March 2022. The numbers of crash deaths in 2015 and 2019 for the Netherlands are reported by the Institute for Road Safety Research (SWOV) and are determined by comparing and combining three data sources. <https://swov.nl/en/fact-sheet/road-deaths-netherlands>

§ Countries are listed in descending order by 2019 MVC deaths per 100,000 population.

¶ The following numbers were considered estimates: MVC deaths for Canada in 2019, vehicle miles traveled for Canada and Australia in 2015 and 2019, and vehicle miles traveled for Denmark, Ireland, and Switzerland in 2015.

** The following numbers were considered provisional: MVC deaths for Australia in 2019 and vehicle miles traveled for the Netherlands and Germany in 2019.

†† Vehicle miles traveled (in billions) and percent changes were calculated based on numbers that were not rounded. However, after being calculated, they were rounded to the nearest 10th of a decimal point.

§§ MVC deaths per 100 million vehicle miles traveled and per 10,000 registered vehicles were calculated based on numbers that were not rounded. However, after being calculated, they were rounded to the nearest 100th of a decimal point.

¶¶ Hungary, Belgium, Germany, and Denmark report the number of registered vehicles excluding mopeds; all other countries report the number of registered vehicles including mopeds.

*** Chile changed its definition for MVC deaths starting in 2019, which creates a trend break. Data for MVC deaths in Chile in 2019 cannot be compared with previous years. Therefore, 2015 MVC deaths and any calculations that would be based on 2015 MVC deaths are not reported for Chile.

††† Finland changed its methodology for determining vehicle kilometers traveled (which were converted to vehicle miles traveled) starting in 2016, and Germany and Slovenia changed their methodology starting in 2017. This creates a trend break. Data for vehicle miles traveled in Finland, Germany, and Slovenia in 2019 cannot be compared with previous years. Therefore, 2015 vehicle miles traveled and any calculations based on 2015 vehicle miles traveled are not reported for Finland, Germany, or Slovenia.

represents a 10.5% increase from 2020, an 18.0% increase from 2019 (even with similar levels of vehicle miles traveled), and the highest number of deaths since 2005 (2).

The World Health Organization (WHO) launched the first Decade of Action for Road Safety (2011–2020) and established global road safety goals,^{§§} including halving crash deaths and injuries by 2020 (in line with Sustainable Development Goal Target 3.6).^{¶¶} These goals were not achieved globally. Because crash deaths and injuries continue to be a major public health and development issue, WHO initiated a second Decade of Action for Road Safety. The adopted resolution^{***} recommits to halving crash deaths and injuries during 2021–2030. The associated Global Action Plan^{†††} emphasizes the holistic Safe System approach^{§§§}: a proactive approach that prioritizes safety of all road users, accommodates for human error and human vulnerability, and incorporates road and vehicle designs that reduce crashes as well as deaths and injuries when crashes occur. The Safe System approach highlights safe road users, safe vehicles, safe speeds, safe roads, and post-crash care as its five elements.^{¶¶¶} Many high-income countries, including Australia, the Netherlands, New Zealand, Spain, and Sweden, have experience implementing the Safe System approach and have observed substantial crash death reductions (1). Prioritizing and broadly implementing this approach could help the United States and other countries achieve global road safety goals, including Sustainable Development Goal 11.2, which calls for accessible transportation systems that are safe, affordable, and sustainable.^{****}

In a previous report, CDC analyzed motor vehicle crash death data for the United States and 19 other high-income countries from 2000 to 2013 (3). The United States had the smallest decrease in population-based crash death rates among these countries. In that report, CDC recommended implementation of proven strategies to reduce crash deaths. Based on the results of the current study and data for 2020–2021, these recommendations are still applicable. Ample opportunities for progress and proven strategies that can save lives, prevent injuries, and avert medical costs exist.

The Road to Zero Coalition seeks to eliminate all U.S. crash deaths by 2050 through three overarching strategies: redoubling efforts to implement proven, evidence-based strategies;

advancing life-saving technology in vehicles and infrastructure; and prioritizing safety by adopting the Safe System approach and creating a positive safety culture.^{††††} Healthy People 2030 also aims to reduce crash deaths and transportation risk behaviors.^{§§§§} The Bipartisan Infrastructure Law^{¶¶¶¶} enacted in 2021 provides opportunities to complement evidence-based education and enforcement strategies with increased implementation of proven safety countermeasures designed to protect all road users and reduce transportation risk behaviors (1,4,5). The National Roadway Safety Strategy^{*****} released in 2022 establishes a plan emphasizing the Safe System approach and outlining critical actions to address pressing motor vehicle safety issues.

Although IRTAD data precluded direct comparisons of behavioral risk factors, risk factor differences likely contributed to the United States' lack of progress in reducing crash deaths. For example, approximately 30% of U.S. motor vehicle crash deaths (>10,000 deaths a year) are attributable to alcohol-impaired driving.^{†††††} Twenty-six of the 29 countries^{§§§§§} in this study have blood alcohol concentration (BAC) laws set at ≤0.05 grams per deciliter (g/dL) (6); these laws are proven to reduce alcohol-impaired driving (7). In contrast, 49 U.S. states and the District of Columbia (DC) have a BAC limit of 0.08 g/dL, despite evidence indicating that impairment begins at lower BAC levels (7). In 2018, Utah implemented a 0.05 g/dL BAC law; a 2022 report found the law was associated with substantial reductions in motor vehicle crashes, alcohol-involved motor vehicle crashes, and motor vehicle crash deaths per mile driven (8).

Inconsistent restraint use and speed also remain persistent issues. In 2019, ≥47% of U.S. passenger vehicle occupants who were killed in motor vehicle crashes were unrestrained (9). Widespread implementation of primary enforcement seat belt laws covering all seating positions could increase seat belt use; well-publicized high-visibility enforcement of these laws can enhance the benefits (4). As of June 2022, only 20 U.S. states and DC have primary enforcement seat belt laws covering all seating positions^{¶¶¶¶¶} despite their effectiveness. Reducing speeds would save lives of all road users, including pedestrians

^{††††} <https://www.nsc.org/road-safety/get-involved/road-to-zero>

^{§§§§} <https://health.gov/healthypeople/objectives-and-data/browse-objectives/transportation>

^{¶¶¶¶} The Bipartisan Infrastructure Law is also known as the Infrastructure Investment and Jobs Act. <https://www.congress.gov/bill/117th-congress/house-bill/3684/text> and <https://www.transportation.gov/bipartisan-infrastructure-law>

^{*****} <https://www.transportation.gov/NRSS>

^{†††††} <https://www.ihs.org/topics/fatality-statistics/detail/alcohol>

^{§§§§§} The national BAC limit in the United States, the United Kingdom, and Canada is 0.08 g/dL. However, many of Canada's provinces have set lower BAC limits.

^{¶¶¶¶¶} <https://www.ihs.org/topics/seat-belts/seat-belt-law-table>

^{§§} <https://www.who.int/groups/united-nations-road-safety-collaboration/decade-of-action-for-road-safety-2011-2020>

^{¶¶} <https://www.un.org/sustainabledevelopment/health/>

^{***} <https://undocs.org/en/A/RES/74/299>

^{†††} <https://www.who.int/publications/m/item/global-plan-for-the-decade-of-action-for-road-safety-2021-2030>

^{§§§} <https://www.ite.org/technical-resources/topics/safe-systems/>

^{¶¶¶} https://safety.fhwa.dot.gov/zerodeaths/docs/FHWA_SafeSystem_Brochure_V9_508_200717.pdf

^{****} <https://www.un.org/sustainabledevelopment/cities/>

Summary**What is already known about this topic?**

Motor vehicle crashes are preventable but continue to be a leading cause of death in the United States, resulting in an average of 36,791 deaths each year (101 deaths each day) during 2015–2019.

What is added by this report?

In 2019, the population-based motor vehicle crash death rate in the United States (11.1 per 100,000 population) was the highest among 29 high-income countries. The population-based motor vehicle crash death rate decreased from 2015 to 2019 in 22 countries, but not in the United States.

What are the implications for public health practice?

Implementing proven strategies and the Safe System approach, which accounts for human error and works to protect everyone on the road, can help reduce motor vehicle crash deaths and injuries in the United States.

and bicyclists (6). Implementing proven speed-reducing roadway design countermeasures can reduce crashes (5). Speeding contributes to approximately 27% of U.S. motor vehicle crash deaths.^{*****} Additional risk factors such as distraction, drug impairment, and fatigue also contribute to thousands of crash deaths every year.

The findings in this report are subject to at least two limitations. First, the United States surpasses all other included countries in population, vehicle miles traveled, and registered vehicles. Although various death rates were calculated to help account for these differences, other factors (e.g., population density, road infrastructure, and policies) cannot be accounted for because of data limitations. Second, although IRTAD data are standardized, small differences exist in how some countries collected and reported crash deaths and related metrics.

Compared with other high-income countries, the United States continues to lag behind in road safety. Other high-income countries have demonstrated that substantial reductions in crash deaths can be achieved. Although various U.S. cities and communities have committed to a goal of zero crash deaths and injury reductions, widespread multisectoral commitment and collaborative action toward achieving zero deaths are needed for the United States to make significant improvements. Motor vehicle crash deaths and injuries are a public health problem, but one with proven solutions. Increased and proactive implementation of proven road safety strategies, especially those addressing leading risk factors, could have an immediate effect. The United States could further reduce motor vehicle crash deaths and injuries by broadly embracing and applying the Safe System approach.

^{*****} <https://www.iihs.org/topics/fatality-statistics/detail/yearly-snapshot#speeding>

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