

Table 1.1 Deaths (all ages) in the United States in 1997 (from National Safety Council, 2000).

Deaths due to diseases: (2,168,220 total deaths due to diseases)

total	cause of death	subtotal
726,974	heart disease	
539,577	cancer (approx. 150,000 lung cancer, 85% related to smoking)	
364,506	other diseases not listed here	
159,791	stroke (estimated)	
109,029	chronic obstructive pulmonary disease	
86,449	pneumonia and influenza	
62,636	diabetes mellitus	
25,331	nephritis and nephrosis	
25,183	chronic liver disease, cirrhosis	
22,401	septicemia	
16,735	arteriosclerosis	
16,516	AIDS (human immunodeficiency virus infection)	
13,092	certain conditions originating in prenatal period	

Accidental deaths: (95,644 total, 5,100 of which were in the workplace)

total	cause of death	subtotal
45,798	transportation accidents	
	motor-vehicle	43,458
	air and space transport	734
	water transport	758
	railway	527
	other road vehicle	220
	vehicle accidents not elsewhere classifiable	101
15,447	falls	
9,587	poisonings by solids and liquids	
	drugs, medicaments, and biologicals	9,099
	alcohol	342
	other solids and liquids	135
	foodstuffs and poisonous plants	11
5,629	other accidental deaths not listed here	
3,561	drowning (excluding water transport drowning)	
3,490	fire and flames	
3,043	complications, misadventures of surgical, medical care	
2,180	inhalation and ingestion of objects other than food	
1,316	natural and environmental factors	
	excessive cold	501
	hunger, thirst, exposure, and neglect	224
	excessive heat	182
	cataclysmic storms, and floods resulting from storms	136
	other injury caused by animal (19 of these from dog bites)	102
	poisoning by toxic reaction to venomous animals and plants	68
	lightning	58
	other natural and environmental factors	25
	cataclysmic earth surface movements and eruptions	20
1,145	mechanical suffocation	
1,095	inhalation and ingestion of food	
1,055	machinery	

total	cause of death	subtotal
981	firearm missile	
576	poisonings by gases and vapors	
	non-motor-vehicle exhaust gas	251
	motor-vehicle exhaust gas	208
	other gases and vapors	117
488	electric current	
149	explosive material	
104	cutting or piercing instruments or objects	
0	radiation	

Deaths other than due to accident or disease: (54,047 total)

total	cause of death	subtotal
30,535	suicide	
	firearms	17,566
	hanging, strangulation, and suffocation	5,413
	motor-vehicle exhaust gas	1,367
	jumping from high places	600
	cutting and piercing instruments	499
	other suicides	1,780
	poisoning by solid and liquid substances	3,310
19,491	homicide	
3,657	undetermined whether accidentally or purposely inflicted	
355	legal intervention	
9	operations of war	

Table 1.2 Motor vehicle deaths and nonfatal injuries in the USA in 1999 (from National Safety Council, 2000).

type of vehicle accident	deaths (to nearest 100)	nonfatal injuries (to nearest 1000)
vehicle-vehicle	18,800	1,580,000
vehicle-fixed object	11,100	330,000
vehicle-pedestrian	5,800	95,000
noncollision accident (jackknife, etc.)	4,300	110,000
vehicle-pedalcycle	900	70,000
vehicle-train	300	2,000
other collision (vehicle-animal, vehicle-buggy, etc.)	100	13,000
total	41,300	2,200,000

Table 1.3 Worker deaths and injuries in the United States in 1999 with percent change from 1998; “nil” implies below 0.5% (from National Safety Council, 2000).

industry	workers ^a (to nearest 1,000)	deaths ^a	death rates ^b	disabling injuries (to nearest 10,000)
construction	8,479,000	1,190 (+ 5)	14.0 (- 1)	400,000
transportation	7,948,000	850 (+ 3)	10.7 (nil)	370,000
agriculture ^c	3,348,000	770 (- 4)	22.5 (nil)	150,000
services ^c	46,766,000	640 (+ 2)	1.4 (nil)	900,000
manufacturing	19,993,000	600 (- 4)	3.0 (nil)	670,000
government	20,118,000	470 (+ 1)	2.3 (- 4)	580,000
trade ^c	27,473,000	450 (+ 2)	1.6 (nil)	710,000
mining ^c	562,000	130 (- 8)	23.1 (nil)	20,000
all industry	134,688,000	5,100 (nil)	3.78 (nil)	3,800,000

Footnotes:

- (a) Workers and death rates include persons 16 years or older; deaths include all ages.
- (b) Deaths per 100,000 workers in each group.
- (c) Agriculture includes forestry and fishing (see National Safety council). Mining includes quarrying, oil and gas extraction. Trade includes wholesale and retail trade. Services includes finances, insurance, and real estate.

Table 1.5 Risks of fatality from various activities (from Wilson and Crouch, 1987; Lehr, 1992).

action	annual risk	uncertainty
cancer related to cigarettes (1 pack/day)	3.6×10^{-3}	factor of 3
all cancers	2.8×10^{-3}	10%
mountaineering (mountaineers)	6×10^{-4}	50%
motor vehicle accident (total)	2.4×10^{-4}	10%
police killed line of duty (total)	2.2×10^{-4}	20%
electrocution	1.1×10^{-4}	5%
motor vehicle accident (pedestrian)	4.2×10^{-5}	10%
alcohol, light drinker	2×10^{-5}	factor of 10
4 tablespoons peanut butter/day	8×10^{-6}	factor of 3
death due to home falls	3.5×10^{-6}	unknown
drinking water with EPA limit of chloroform	6×10^{-7}	factor of 10
drinking water with EPA limit of trichloroethylene	2×10^{-9}	factor of 10

Table 1.6 HERP index (abstracted from Ames, Magaw, and Gold, 1987).

daily human exposure	dose per day per 70-kg person	HERP (%)
basil (1 g of dried leaf)	estragole (3.8 mg)	0.1
beer (12 oz)	ethyl alcohol (18 mL)	2.8
chlorinated tap water (1 L)	chloroform (83 µg)	0.001
comfrey herb tea (1 cup)	symphytine (38 µg)	0.03
contaminated well water (1 L) (Silicon Valley, CA)	trichloroethylene (2800 µg)	0.004
contaminated well water (1 L) (Woburn, Mass.)	trichloroethylene (267 µg)	0.0004
	chloroform (12 µg)	0.0002
	tetrachloroethylene (21 µg)	0.0003
conventional home (14 hr/day)	formaldehyde (598 µg)	0.6
	benzene (155 µg)	0.004
cooked bacon (100 g)	dimethylnitrosamine (0.3 µg)	0.003
	diethylnitrosamine (0.1 µg)	0.006
diet cola (12 oz)	saccharin (95 mg)	0.06
dried squid, broiled in gas oven (54 g)	dimethylnitrosamine (7.9 µg)	0.06
EDB daily intake (high exposure agricultural worker)	ethylene dibromide (150 mg)	140.0
mobile home air (14 hr/day)	formaldehyde (2.2 mg)	2.1
mushroom, one raw (15 g)	mix of hydrazines	0.1
mustard, brown (5 g)	allyl isothiocyanate (4.6 µg)	0.07
peanut butter (32 g)	aflatoxin (0.064 µg)	0.03
pesticide residue on food (daily diet, average intake)	PCB - polychlorinated biphenyls (0.2 µg)	0.0002
	DDE - principal metabolite of DDT (2.2 µg)	0.0003
	ethylene dibromide (0.42 µg)	0.0004
sake (250 mL)	urethane (43 µg)	0.003
swimming pool (1 hr, child)	chloroform (250 µg)	0.008
wine (250 mL)	ethyl alcohol (30 mL)	4.7
worker average daily intake	formaldehyde (6.1 mg)	5.8