

Which jobs are most damaging to your health?



Written by
Andy Kiersz, Quant Reporter, Business Insider
Wednesday 11 November 2015

This article is published in collaboration with [Business Insider](#).

Some jobs intrinsically have more health risks than others. A nurse working in a hospital is more likely to catch an infectious disease than a lawyer working in an office, for example.

To rank the most unhealthy jobs in America, we used data from the [Occupational Information Network](#), a US Department of Labor database full of detailed information on occupations.

In order to analyze jobs by their impact on workers' health, we took O*NET measures of six health risks in each of the 974 occupations in the database: exposure to contaminants; exposure to disease and infection; exposure to hazardous conditions; exposure to radiation; risk of minor burns, cuts, bites, and stings; and time spent sitting, since studies show that [frequent inactivity shortens your lifespan](#). O*NET scores these factors on a scale from 0 to 100, with a higher score indicating an increased health risk.

Read on to find out which jobs have the most potential to damage your health.

Max Nisen contributed to an earlier version of this post.

Top 10 most unhealthy jobs

Dentist

Flight attendant

Anesthesiologist

Veterinarian

Podiatrist

Immigration and customs inspector

Histotechnologist

Water and wastewater plant and system operator

Stationary engineer and boiler operator

Surgical and medical assistant

Source: US Department of Labor; Business Insider

1. Dentists, dental surgeons, and dental assistants*

Overall unhealthiness score: 65.4

What they do: Examine, diagnose, and treat diseases, injuries, and malformations of teeth and gums. May treat diseases of nerve, pulp, and other dental tissues affecting oral hygiene and

retention of teeth. May fit dental appliances or provide preventive care.

Top three health risks:

1. Exposure to contaminants: 84
2. Exposure to disease and infections: 75
3. Time spent sitting: 67

** This category combines the related detailed jobs of general dentists, dental hygienists, dental laboratory technicians, dental assistants, and prosthodontists.*

2. Flight attendants

Overall unhealthiness score: 62.3

What they do: Provide personal services to ensure the safety, security, and comfort of airline passengers during flight. Greet passengers, verify tickets, explain use of safety equipment, and serve food or beverages.

Top three health risks:

1. Exposure to contaminants: 88
2. Exposure to disease and infections: 77
3. Exposure to minor burns, cuts, bites, or stings: 69

3. Anesthesiologists, nurse anesthetists, and anesthesiologist assistants*

Overall unhealthiness score: 62.3

What they do: Administer anesthetics or sedatives during medical procedures, and help patients in recovering from anesthesia.

Top three health risks:

1. Exposure to disease and infections: 94
2. Exposure to contaminants: 80
3. Exposure to radiation: 74

** This category combines the related detailed jobs of anesthesiologist, nurse anesthetist, and anesthesiologist assistant.*

4. Veterinarians and veterinary assistants and technicians*

Overall unhealthiness score: 60.3

What they do: Diagnose, treat, or research diseases and injuries of animals and perform medical tests in a laboratory environment for use in the treatment and diagnosis of diseases in animals.

Top three health risks:

1. Exposure to disease and infections: 81
2. Exposure to minor burns, cuts, bites, or stings: 75
3. Exposure to contaminants: 74

** This category combines the related detailed jobs of veterinarians, veterinary assistants, and laboratory animal caretakers and veterinary technologists and technicians.*

5. Podiatrists

Overall unhealthiness score: 60.2

What they do: Diagnose and treat diseases and deformities of the human foot.

Top three health risks:

1. Exposure to disease and infections: 87
2. Exposure to radiation: 69
3. Exposure to contaminants: 67

6. Immigration and customs inspectors

Overall unhealthiness score: 59.3

What they do: Investigate and inspect people, common carriers, goods, and merchandise, arriving in or departing from the US or between states to detect violations of immigration and customs laws and regulations.

Top three health risks:

1. Exposure to contaminants: 78
2. Exposure to disease and infections: 63
3. Exposure to radiation: 62

7. Histotechnologists and histologic technicians

Overall unhealthiness score: 59.0

What they do: Prepare histologic slides from tissue sections for microscopic examination and diagnosis by pathologists.

Top three health risks:

1. Exposure to hazardous conditions: 88
2. Exposure to contaminants: 76
3. Exposure to disease and infections: 75

8. Water and wastewater treatment plant and system operators

Overall unhealthiness score: 58.2

What they do: Operate or control an entire process or system of machines, often through the use of control boards, to transfer or treat water or wastewater.

Top three health risks:

1. Exposure to contaminants: 97
2. Exposure to hazardous conditions: 80
3. Exposure to minor burns, cuts, bites, or stings: 74

9. Stationary engineers and boiler operators

Overall unhealthiness score: 57.7

What they do: Operate or maintain stationary engines, boilers, or other mechanical equipment to provide utilities for buildings or industrial processes.

Top three health risks:

1. Exposure to contaminants: 99
2. Exposure to hazardous conditions: 89
3. Exposure to minor burns, cuts, bites, or stings: 84

10. Surgical and medical assistants, technologists, and technicians*

Overall unhealthiness score: 57.3

What they do: Assist in operations, under the supervision of surgeons, registered nurses, or other surgical personnel and perform medical laboratory tests.

Top three health risks:

1. Exposure to disease and infections: 88
2. Exposure to contaminants: 80
3. Exposure to hazardous conditions: 69

** This job category combines the related detailed occupations of surgical assistants, surgical technologists, and medical and clinical laboratory technologists.*

11. Derrick operators (oil and gas)

Overall unhealthiness score: 56.0

What they do: Rig derrick equipment and operate pumps to circulate mud through a drill hole.

Top three health risks:

1. Exposure to contaminants: 100
2. Exposure to minor burns, cuts, bites, or stings: 93
3. Exposure to hazardous conditions: 91

12 (tie). Medical equipment preparers

Overall unhealthiness score: 55.7

What they do: Prepare, sterilize, install, or clean laboratory or healthcare equipment. May perform routine laboratory tasks and operate or inspect equipment.

Top three health risks:

1. Exposure to contaminants: 94
2. Exposure to disease and infections: 92
3. Exposure to hazardous conditions: 64

12 (tie). Airline pilots, copilots, and flight engineers

Overall unhealthiness score: 55.7

What they do: Pilot and navigate the flight of fixed-wing, multi-engine aircraft, usually on scheduled air-carrier routes, for the transport of passengers and cargo.

Top three health risks:

1. Time spent sitting: 93
2. Exposure to radiation: 73

3. Exposure to contaminants: 68

14. Nuclear equipment operation technicians

Overall unhealthiness score: 55.2

What they do: Operate equipment used for the release, control, or use of nuclear energy to assist scientists in laboratory or production activities.

Top three health risks:

1. Exposure to radiation: 89
2. Exposure to hazardous conditions: 77
3. Exposure to contaminants: 65

15. Refuse and recyclable material collectors

Overall unhealthiness score: 55.0

What they do: Collect and dump refuse and recyclable materials into trucks.

Top three health risks:

1. Exposure to contaminants: 97
2. Time spent sitting: 69
3. Exposure to disease and infections: 63

16. Refractory materials repairers (except brickmasons)

Overall unhealthiness score: 54.8

What they do: Build or repair equipment such as furnaces, kilns, cupolas, boilers, converters, ladles, soaking pits, and ovens, using refractory materials.

Top three health risks:

1. Exposure to contaminants: 100
2. Exposure to hazardous conditions: 85
3. Risk of minor burns, cuts, bites, or stings: 85

17 (tie). Emergency medical technicians and paramedics

Overall unhealthiness score: 54.0

What they do: Assess injuries, administer emergency medical care, and extricate trapped individuals. Transport injured or sick people to medical facilities.

Top three health risks:

1. Exposure to disease and infections: 89
2. Exposure to contaminants: 73
3. Risk of minor burns, cuts, bites, and stings: 53

17 (tie). Continuous mining-machine operators

Overall unhealthiness score: 54.0

What they do: Operate self-propelled mining machines that rip coal, metal and nonmetal ores, rock, stone, or sand from the mine face and load it onto conveyors or into shuttle cars in a continuous operation.

Three biggest health risks:

1. Exposure to contaminants: 100
2. Exposure to hazardous conditions: 98
3. Risk of minor burns, cuts, bites, and stings: 64

19 (tie). Service unit operators (oil, gas, and mining)

Overall unhealthiness score: 53.7

What they do: Operate equipment to increase oil flow from producing wells or to remove stuck pipe, casing, tools, or other obstructions from drilling wells and other mining operations.

Top three health risks:

1. Exposure to contaminants: 94
2. Exposure to hazardous conditions: 89
3. Risk of minor burns, cuts, stings, and bites: 77

19 (tie). Chemical plant and system operators

Overall unhealthiness score: 53.7

What they do: Control or operate chemical processes or systems of machines.

Top three health risks:

1. Exposure to hazardous conditions: 99
2. Exposure to contaminants: 96
3. Risk of minor burns, cuts, bites, or stings: 71

21. Critical care nurses

Overall unhealthiness score: 53.5

What they do: Provide advanced nursing care for patients in critical or coronary care units.

Top three health risks:

1. Exposure to disease and infections: 99
2. Exposure to contaminants: 65
3. Exposure to radiation: 61

22. Refrigeration mechanics and installers

Overall unhealthiness score: 53.3

What they do: Install and repair industrial and commercial refrigerating systems.

Three biggest health risks:

1. Exposure to hazardous conditions: 93
2. Exposure to contaminants: 91
3. Risk of minor burns, cuts, bites, and stings: 71

23. Nuclear medicine technologists

Overall unhealthiness score: 53.0

What they do: Prepare radioactive isotopes for use in diagnostic medical procedures.

Top three health risks:

1. Exposure to radiation: 100
2. Exposure to disease and infections: 93
3. Exposure to contaminants: 44

24 (tie). Radiologists

Overall unhealthiness score: 52.8

What they do: Examine and diagnose disorders and diseases using X-rays and radioactive materials.

Top three health risks:

1. Exposure to radiation: 87
2. Exposure to disease and infections: 85
3. Time spent sitting: 74

24 (tie). Metal-refining furnace operators and tenders

Overall unhealthiness score: 52.8

What they do: Operate or tend furnaces to melt and refine metal before casting or to produce specified types of steel.

Top three health risks:

1. Exposure to contaminants: 100
2. Risk of minor burns, cuts, bites, and stings: 96
3. Exposure to hazardous conditions: 94

24 (tie). Embalmers

Overall unhealthiness score: 52.8

What they do: Prepare bodies for burial in conformity with legal requirements.

Top three health risks:

1. Exposure to disease and infections: 83
2. Exposure to contaminants: 83
3. Exposure to hazardous conditions: 75

24 (tie). Elevator installers and repairers

Overall unhealthiness score: 52.8

What they do: Install and repair elevators.

Top three health risks:

1. Exposure to hazardous conditions: 98
2. Exposure to contaminants: 82

3. Risk of minor burns, cuts, bites, or stings: 61

Publication does not imply endorsement of views by the World Economic Forum.

To keep up with the Agenda [subscribe to our weekly newsletter](#).

Author: Andy Kiersz is a quant reporter at Business Insider.

Image: Dentist treats a patient. REUTERS/Alkis Konstantinidis.

Written by

[Andy Kiersz](#), Quant Reporter, Business Insider

The views expressed in this article are those of the author alone and not the World Economic Forum.

Subscribe for updates

A weekly update of what's on the Global Agenda

Email	Subscribe
-------	-----------
