A Catalog Of Risks

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FROM ABSTRACT

Information on risks is collected from various sources and converted into loss of life expectancy throughout life and in various age ranges.

Risks included are radiation, accidents of various types, various diseases, overweight, tobacco use, alcohol and drugs, coffee, saccharin, and The Pill, occupational risks, socioeconomic factors, marital status, geography, serving in the US armed forces in Vietnam, catastrophic events, energy production, and technology in general.

Information is also included on methods for reducing risks, risks in individual actions, “very-hazardous” activities, and priorities and perspective.

Risks of natural and occupational radiation and exposure to radioactivity from the nuclear industry are compared with risks of similar or competing activities.

THESE AUTHORS ALSO NOTE:

“The public is constantly harangued about all sorts of risks, and its perception of risks plays an important role in governmental decision making.”

The risks of radiation are especially emphasized in the popular press.

Yet, the public does not understand risk.

The public gets very excited about radiation risks, which are almost never fatal, whereas it largely ignores other risks, which claim thousands of lives every year.

An expression of risk that would be understood by the public would be in terms of “days of life expectancy lost.”

The loss of life expectancies due to natural radiation of 100 mrem/yr is 9 days.

The loss of life expectancies due to occupational exposure to radiation of 500 mrem/yr is 36 days.

Routine releases of radioactivity from the nuclear industry would give the average American an additional exposure of about 0.2mrem/yr if ALL US electric power was nuclear. This is 0.2% of natural radiation, and reduces life expectancy by about 30 minutes.
The total loss of life expectancy due to accidents is 669 days (1.8 years) for males and 363 days for females. Accidents include motor vehicle deaths (including pedestrians), bicycles, falls, drowning, fire and burns, poisonings, suffocations, and guns.

Both men and women, should expect a loss of about 1 month of life for each pound they are overweight. **[SURPRISING]**

The average male smoker will lose about 6.2 years of life (2263 days).

The average female smoker will lose about 2.2 years of life (803 days).

About 56,000 deaths per year are due to alcohol. This number includes deaths from alcoholism, cirrhosis of the liver, alcohol related motor vehicle deaths, alcohol related oral cavity and esophageal cancer deaths, and alcohol related other accidents, suicides, and homicides. On average, each of these deaths eliminates about 20 years of life expectancy. This loss averaged over the entire US population reduces life expectancy by about 128 days.

“Improper use of drugs in medical treatment is estimated to cause 75,000 deaths per year.” If this reduced life by 10 years in the average case, the loss of life expectancy averaged over the entire US population would be about 91 days.

“About 2,000 deaths per year are directly due to illicit drugs.” An additional 4,000 deaths are due indirectly to illicit drugs, from homicides, motor vehicle accidents, and other accidents. The average victim loses about 25 years of life. Spread over the entire US population results is about an 18-day reduction of life span.

**[This is shocking: 75,000 deaths per year from “improper use of drugs in medical treatment” and 6,000 deaths per year from illegal drugs, which includes related homicides and motor vehicle accidents. If the US Federal Government wants to declare war on drugs, they should first target the practice of medicine. In addition to this number, recall, that as many as 137,000 US citizens die yearly from taking the correct drug, in the correct dose, for the correct problem (JAMA, April 15, 1998). This 137,000 number is the fourth leading cause of death in the USA (same reference).]**

“It is estimated that 24% of male and 49% of female deaths from bladder cancer are due to coffee drinking. **[Scary]** “This accounts for 1,450 male and 1,350 female deaths per year.” Those who died of bladder cancer from drinking coffee would shorten their lives by about 15 years each. Spread over the entire US population this results in about a 6-day reduction of life span. The authors note that coffee drinking causes other health problems other than bladder cancer, and these other risks were not assessed.
“According to the US Food and Drug Administration, if everyone in the US were to drink one diet soft drink each day, there would be an additional 1,200 bladder cancers per year.” Spread over the entire US population this results in about a 2-day reduction of life span.

“It is interesting to point out that an extra 100 calories per day, as in drinking a regular soft drink, would increase one’s body weight by about 7 lb and thereby reduce life expectancy by 7 months or 210 days.”

Coal mining is the most dangerous occupation, costing an average of 3.2 years (1,168 days).

Surprisingly, the data indicates that “medical care is not an important factor” in dying of diseases. However, “low salaried individuals have a 30% higher overall mortality rate and at least a 50% higher mortality rate from lung cancer, cerebrovascular disease, influenza, pneumonia, and accidents than those with medium or high salaries.”

Extreme differences in educational attainment (eighth grade v. college degree) gives a reduced life expectancy of more than 4 years (1,460 days).

Corporation executives add 4.7 years (1,716 days) to their lives.

Business executives add 4.3 years (1,570 days) to their lives.

Professional baseball players add 2.9 years (1,069 days) to their lives.

US Presidents have a reduced life expectancy of 5.1 years (1,862 days). If the assassination of John F. Kennedy is not included, the reduced life expectancy for a US President is 3 years (1,095 days).

Not being married is one of the greatest risks to life expectancy. Men suffer more than women from being unmarried. (see chart)

Moving from one state to another can change one’s life expectancy by 1 or 2 years.

**AVERAGE YEARS OF LIFE PER STATE**

<table>
<thead>
<tr>
<th>73</th>
<th>ND, MN, SD, UT, NB, CT, KS, IA, WI</th>
</tr>
</thead>
<tbody>
<tr>
<td>72</td>
<td>OR, CO, FL, RI, MA, ID, WA, CA, OK, NJ, TX, AR, VT, VA, MO, MD</td>
</tr>
<tr>
<td>71</td>
<td>NY, MI, OH, DE, IN, AZ, IL, TN, NH, PA, NC, MT, NM, ME, AL, LA, KY, DC, GA</td>
</tr>
<tr>
<td>70</td>
<td>MS, SC, WV</td>
</tr>
<tr>
<td>69</td>
<td>NV</td>
</tr>
</tbody>
</table>
One sometimes hears that “technology is an overall threat to our health and safety.” However, comparing life expectancies in technology developed v. undeveloped countries, “we see that technology can clearly be credited for several decades of increased life expectancy.”

Energy production is our most polluting industry. All pollution reduces our life expectancy by not more than 100 days.

**AVERAGE YEARS OF LIFE PER COUNTRY**

71  USA, CANADA, AUSTRALIA, NEW ZELAND, UK, FRANCE, GERMANY, JAPAN  
68  POLAND, RUMANIA  
67  ARGENTINA  
65  YUGOSLAVIA  
64  PORTUGAL  
61  MEXICO  
57  PERU  
55  TURKEY  
52  EGYPT  
45  INDIA  
42  INDONESIA, KENYA, GHANA  
40  HAITI, CONGO  
32  CHAD, UPPER VOLTA, IVORY COAST  
30  GUINEA

**AVERAGE YEARS OF LIFE PER REGION**

NORTH AMERICA  71  
EUROPE  70  
LATIN AMERICA  60  
ASIA  50  
AFRICA  43

**LOSS OF LIFE FROM CATASTROPHIC EVENTS, AVERAGED OVER ENTIRE US POPULATION**

NUCLEAR REACTOR ACCIDENTS, 1st YR  2 hrs, 24 min  
NUCLEAR REACTOR ACCIDENT, NEXT 50 YRS  4 hrs, 48 minutes  
(BOTH ASSUMES ALL US POWER IS NUCLEAR)  
CHEMICAL RELEASES  2 hrs, 24 min  
AIRLINE CRASHES (PEOPLE ON GROUND)  2 hrs, 24 min  
EARTHQUAKES  2 hrs, 24 min  
MAJOR EXPLOSIONS  4 hrs, 48 min  
HURRICANES  12 hrs  
TORONADOS  12 hrs  
DAM FAILURES  12 hrs  
MAJOR FIRES  12 hrs  
AIRLINE CRASHES (PASSENGERS)  24 hrs
Farmers live about 256 days longer than urban dwellers.

The news media gives extensive coverage to incidents involving large loss of life.

Hurricanes cause about 90 deaths per year. If the average fatality corresponds to 35 yrs of lost life, the average American loses 12 hours of life due to this hazard.

Smoking a cigarette has the risk of 7 mrem of radiation. Eating a piece of pie a-la-mode runs a risk equal to that of 35 mrem of radiation exposure.

The risk of dying as a result of a nuclear power plant accident if we had all nuclear power in this country would reduce life expectancy by 30 minutes according to one study and by 2 days according to another study. “Only a few percent of these fatalities would occur within the first few months, and the remainder would represent an undetectable increase in cancer risks over the following half century.”

### TIME OF LIFE LOST FROM INDIVIDUAL ACTIONS

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time Lost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Fastening Seat Belt</td>
<td>6 Seconds per mile</td>
</tr>
<tr>
<td>Drinking a Diet Soft Drink</td>
<td>9 Seconds</td>
</tr>
<tr>
<td>Extra Driving</td>
<td>24 Seconds per mile</td>
</tr>
<tr>
<td>Crossing the Street</td>
<td>24 Seconds</td>
</tr>
<tr>
<td>1 Mrem of Radiation</td>
<td>1.5 Minutes</td>
</tr>
<tr>
<td>Smoking a Cigarette</td>
<td>10 Minutes</td>
</tr>
<tr>
<td>Drinking a Regular Soft Drink</td>
<td>15 Minutes</td>
</tr>
<tr>
<td>Eating a Calorie Rich Dessert</td>
<td>50 Minutes</td>
</tr>
<tr>
<td>Taking a Coast to Coast Flight</td>
<td>1 Hour 40 Minutes</td>
</tr>
<tr>
<td>Driving Coast to Coast</td>
<td>16 Hours 40 Minutes</td>
</tr>
<tr>
<td>Buying a Small Car</td>
<td>5 Days</td>
</tr>
<tr>
<td>Choose Vietnam Army Duty</td>
<td>417 Days</td>
</tr>
<tr>
<td>Moving to an Unfavorable State</td>
<td>556 Days</td>
</tr>
</tbody>
</table>

### DAYS ADDED TO LIFE EXPECTANCY BY VARIOUS ACTIONS

<table>
<thead>
<tr>
<th>Activity</th>
<th>Days Added</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoke Alarm in Home</td>
<td>10 Days</td>
</tr>
<tr>
<td>Using Seat Belts</td>
<td>50 Days</td>
</tr>
<tr>
<td>Driving an Air Bag Installed Car</td>
<td>50 Days</td>
</tr>
<tr>
<td>Buying a Larger Car</td>
<td>50 Days</td>
</tr>
<tr>
<td>Training Family in Resuscitation</td>
<td>More than 100 Days</td>
</tr>
</tbody>
</table>
These authors conclude that to increase life expectancy, the priorities should be:

1) Reduce the number of unmarried adults.

2) Controlling overweight problems.

3) Move to a better state, and do not move to a bad state (Nevada).

4) Less attention should be paid to radiation hazards and catastrophes.

This article was given to me by Don Harrison from Chiropractic Biophysics.