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[http://www.swivel.com/data\\_sets/show/1001500](http://www.swivel.com/data_sets/show/1001500)

Series 1 <http://www.swivel.com/graphs/edit/1154616>

Series 2 <http://www.swivel.com/graphs/edit/1171334>

**Step 1 Obtain the test data (ABSOLUTE)**

Year	Suffocation (ingestion of food, object)	Fire, flame, smoke	Drowning	Poisoning	Falls	Motor vehicle	Firearms
1970	2,753	6,718	7,860	5,299	16,926	54,633	2,406
1980	3,249	5,822	7,257	4,331	13,294	53,172	1,955
1985	3,551	4,938	5,316	5,170	12,001	45,901	1,649
1990	3,303	4,175	4,685	5,803	12,313	46,814	1,416
1991	3,240	4,120	4,818	6,434	12,662	43,536	1,441
1992	3,182	3,958	3,542	7,082	12,646	40,982	1,409
1993	3,160	3,900	3,807	8,537	13,141	41,893	1,521
1994	3,065	3,986	3,942	8,994	13,450	42,524	1,356
1995	3,185	3,761	4,350	9,072	13,986	43,363	1,225
1996	3,206	3,741	3,959	9,510	14,986	43,649	1,134
1997	3,275	3,490	4,051	10,163	15,447	43,458	981
1998	3,515	<b>3,255</b>	4,406	10,801	16,274	43,501	866
1999	3,885	3,348	3,529	12,186	13,162	42,401	824
2000	4,313	3,377	3,482	12,757	13,322	43,354	776
2001	4,185	3,309	<b>3,281</b>	14,078	15,019	43,788	802
2002	4,128	3,159	3,447	18,550	16,257	45,380	762
2003	4,500	3,400	3,700	14,900	19,800	44,100	700
2004	4,900	3,900	3,800	13,300	20,200	46,200	700

**CORREL** -0.505029 0.94608 -0.690302 0.56286 0.190675 0.645939

**Step 2: Generate summary statistics**

Year	Choke	Fire	Drown	Poison	Falls	Auto	Guns
<b>MEAN</b>	3,589	4,020	4,402	9,832	14,716	44,925	1,218
<b>MAX</b>	4,900	6,718	7,860	18,550	20,200	54,633	2,406

**Step 3: Normalize Relative to the Average**

Year	Choke	Fire	Drown	Poison	Falls	Auto	Guns
1970	-23%	67%	79%	-46%	15%	22%	98%
1980	-9%	45%	65%	-56%	-10%	18%	61%
1985	-1%	23%	21%	-47%	-18%	2%	35%
1990	-8%	4%	6%	-41%	-16%	4%	16%
1991	-10%	2%	9%	-35%	-14%	-3%	18%
1992	-11%	-2%	-20%	-28%	-14%	-9%	16%
1993	-12%	-3%	-14%	-13%	-11%	-7%	25%
1994	-15%	-1%	-10%	-9%	-9%	-5%	11%
1995	-11%	-6%	-1%	-8%	-5%	-3%	1%
1996	-11%	-7%	-10%	-3%	2%	-3%	-7%
1997	-9%	-13%	-8%	3%	5%	-3%	-19%
1998	-2%	-19%	0%	10%	11%	-3%	-29%
1999	8%	-17%	-20%	24%	-11%	-6%	-32%
2000	20%	-16%	-21%	30%	-9%	-3%	-36%
2001	17%	-18%	-25%	43%	2%	-3%	-34%
2002	15%	-21%	-22%	89%	10%	1%	-37%
2003	25%	-15%	-16%	52%	35%	-2%	-43%
2004	37%	-3%	-14%	35%	37%	3%	-43%

**Step 3: Normalize Relative to the Range (Max)**

Year	Choke	Fire	Drown	Poison	Falls	Auto	Guns
1970	56%	100%	100%	29%	84%	100%	100%
1980	66%	87%	92%	23%	66%	97%	81%
1985	72%	74%	68%	28%	59%	84%	69%
1990	67%	62%	60%	31%	61%	86%	59%
1991	66%	61%	61%	35%	63%	80%	60%
1992	65%	59%	45%	38%	63%	75%	59%
1993	64%	58%	48%	46%	65%	77%	63%
1994	63%	59%	50%	48%	67%	78%	56%
1995	65%	56%	55%	49%	69%	79%	51%
1996	65%	56%	50%	51%	74%	80%	47%
1997	67%	52%	52%	55%	76%	80%	41%
1998	72%	48%	56%	58%	81%	80%	36%
1999	79%	50%	45%	66%	65%	78%	34%
2000	88%	50%	44%	69%	66%	79%	32%
2001	85%	49%	42%	76%	74%	80%	33%
2002	84%	47%	44%	100%	80%	83%	32%
2003	92%	51%	47%	80%	98%	81%	29%
2004	100%	58%	48%	72%	100%	85%	29%

Max	100%	100%	100%	100%	100%	100%	100%
Ave	73%	60%	56%	53%	73%	82%	51%
Min	56%	47%	42%	23%	59%	75%	29%