

# Injury Related Hospitalizations in Wisconsin, 1994-1999

Wayne Bigelow, Director  
Wisconsin CODES Project

Ctr. For Health Systems Research & Analysis

UW-Madison

May 4, 2001

# Methods

- **Presentation can be found at:**  
**[www.chsra.wisc.edu/codes](http://www.chsra.wisc.edu/codes)**
- Wisconsin Hospital discharge data for 1994-1999 was used.
- Discharges with an E-Code which did not relate to “adverse therapeutic drug effects” or to misadventures associated with a hospital stay were included in the data.

# Methods 2

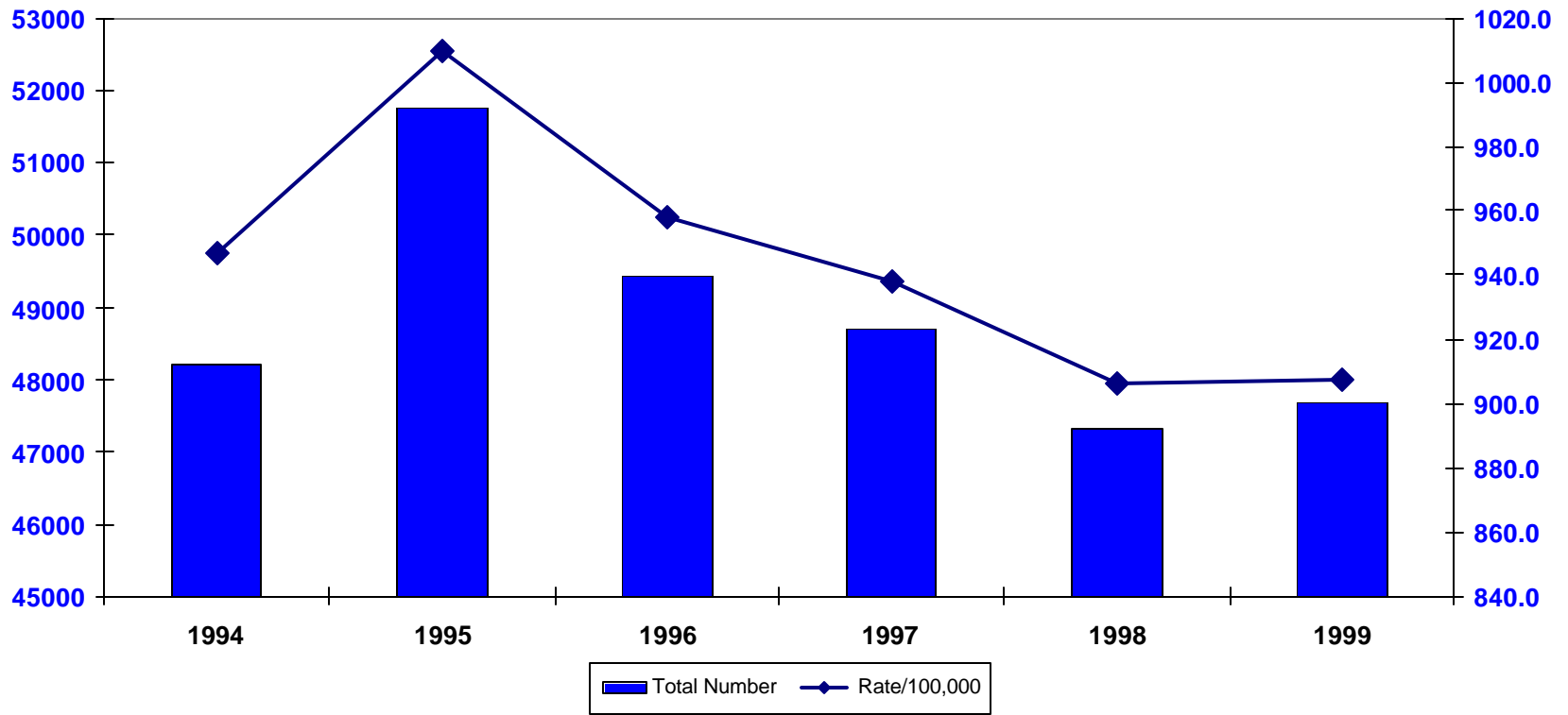
- Discharges with an E-Code were selected for inclusion in the analysis.
- However, discharges for which the E-Code indicated hospitalization due to “adverse therapeutic drug effects” or to adverse effects associated with a hospital stay or other medical care were excluded from the analysis.
- Classification details for cause of injury can be found in:  
*“Recommended Framework for Presenting Injury Mortality Data”* in MMWR, August 29, 1997 (46:RR14; 1-30) or on the internet at:  
[www.cdc.gov/eпо/mmwr/preview/mmwrhtml/00049162.htm](http://www.cdc.gov/eпо/mmwr/preview/mmwrhtml/00049162.htm)

# Goal

- To determine the scope and cost of injury related hospitalizations in Wisconsin.
- To look at the distribution of specific causes of injuries and “intent underlying injuries”.
- To evaluate both the source of injury related hospital admissions and the discharge status of such admissions.
- To evaluate demographic (sex & age) differences in cause of injury and underlying intent of injury.

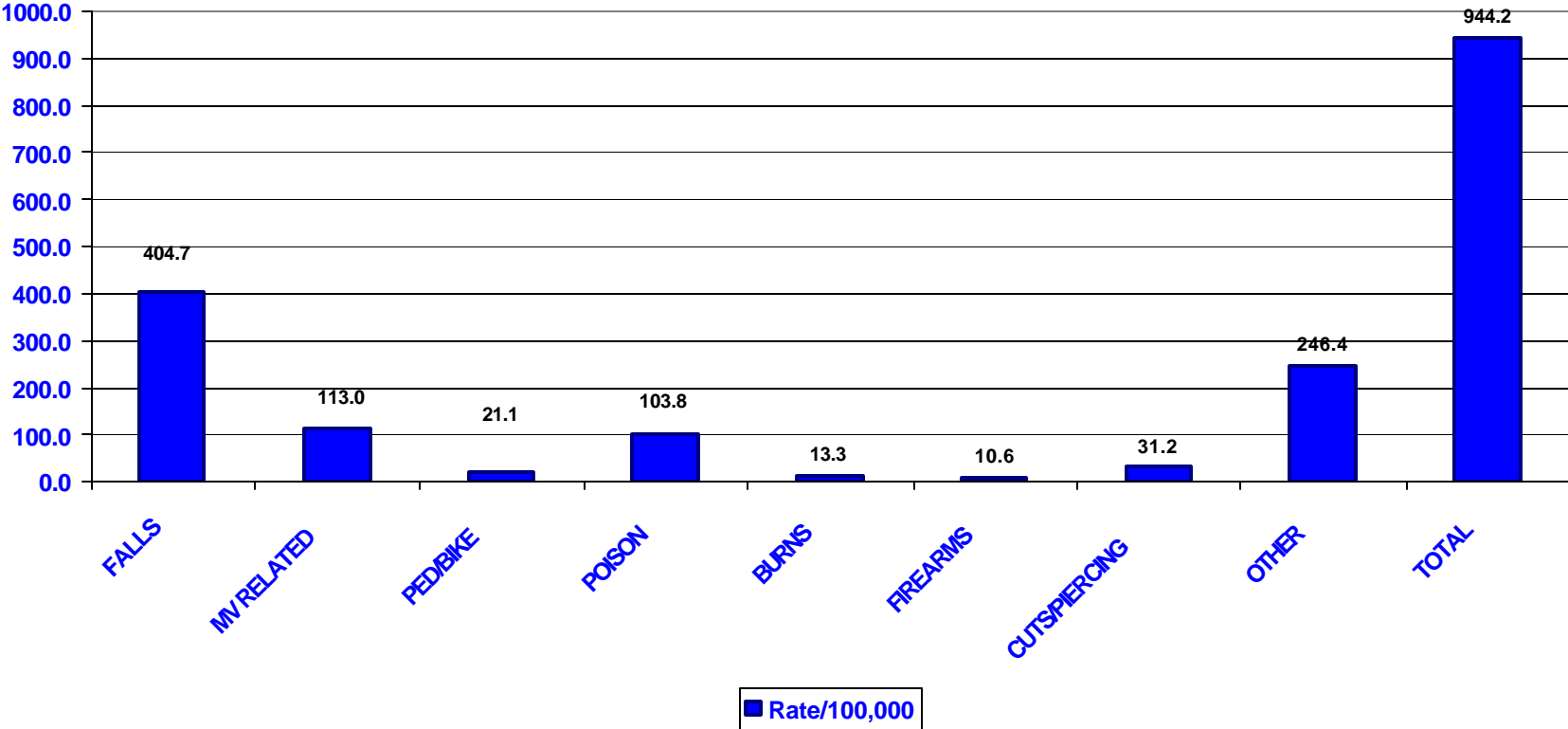
<b>Table 1.</b>			
<b>Number, Hospital Charges and</b>			
<b>Total Days of Hospital Stay for Injury Related</b>			
<b>Hospitalizations, by Year, 1994-1999</b>			
	<b>Number of</b>	<b>Total</b>	<b>Total Days</b>
	<b>Injury Related</b>	<b>Hospital</b>	<b>of Hospital</b>
	<b>Hospitalizations</b>	<b>Charges</b>	<b>Stay</b>
<b>1994</b>	<b>48,205</b>	<b>459.0 million</b>	<b>288,274</b>
<b>1995</b>	<b>51,769</b>	<b>510.3 million</b>	<b>299,556</b>
<b>1996</b>	<b>49,429</b>	<b>511.3 million</b>	<b>274,982</b>
<b>1997</b>	<b>48,706</b>	<b>517.2 million</b>	<b>268,286</b>
<b>1998</b>	<b>47,327</b>	<b>522.6 million</b>	<b>251,627</b>
<b>1999</b>	<b>47,680</b>	<b>571.2 million</b>	<b>261,354</b>
<b>Total</b>	<b>293,116</b>	<b>3,091.6 million</b>	<b>1,664,079</b>

**Graph 1.**  
**Number of Injury Hospitalizations and Rate per 100,000 Population, Wisconsin, 1994-1999**

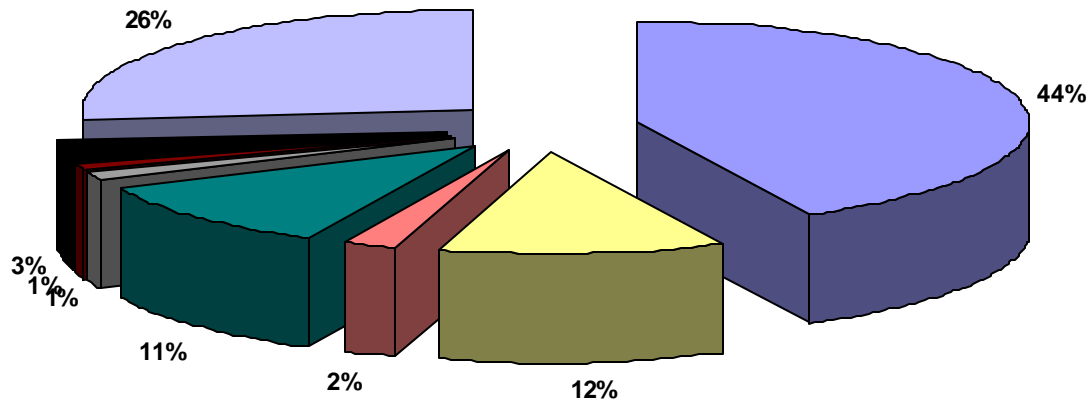




**Graph 2.**  
**Rate per 100,000 for Injury Related Hospitalizations,**  
**by Injury Group, Wisconsin, 1994-1999**



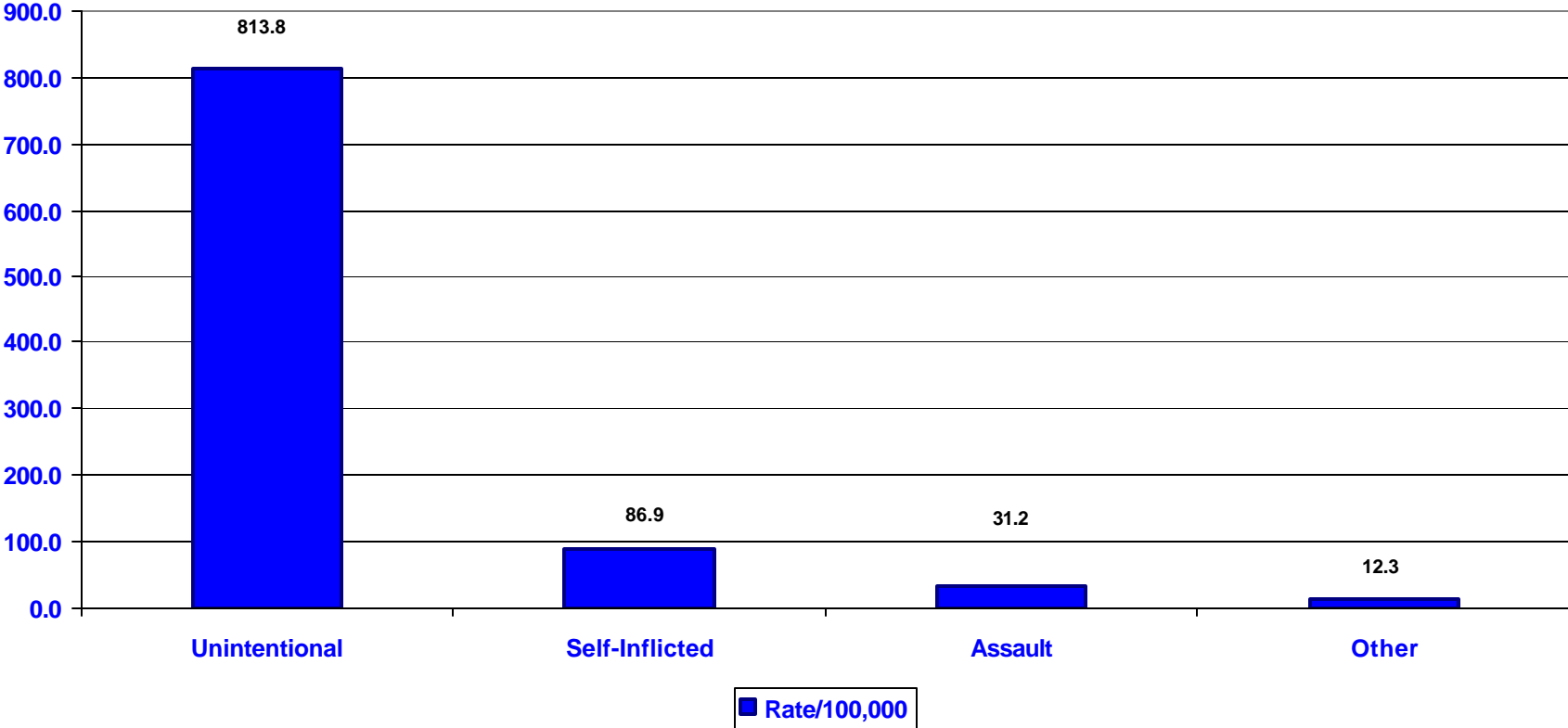
**Graph 3.**  
**Percent of All Injury Related Hospitalizations,**  
**by Injury Group, Wisconsin, 1994-1998**



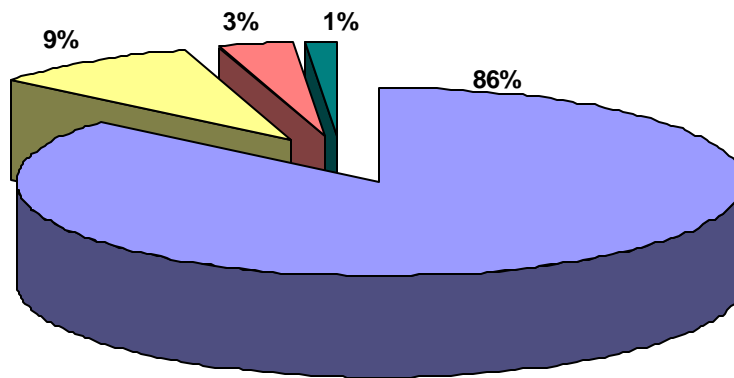
**Table 3.**  
**Number, Rate per 100,000 Population and Total and Average Hospital Charges, for Injury Related Hospitalizations, Intent Underlying Injuries, Wisconsin, 1994-1999**

			<b>Hospital Charges</b>	<b>Average</b>
	<b>Number</b>	<b>Rate/100,000</b>	<b>in Millions</b>	<b>Charge</b>
<b>Unintentional</b>	<b>252,635</b>	<b>813.8</b>	<b>2777.7</b>	<b>\$ 10,995</b>
<b>Self-Inflicted</b>	<b>26,974</b>	<b>86.9</b>	<b>149.8</b>	<b>\$ 5,553</b>
<b>Assault</b>	<b>9,692</b>	<b>31.2</b>	<b>129.6</b>	<b>\$ 13,372</b>
<b>Other</b>	<b>3,824</b>	<b>12.3</b>	<b>34.5</b>	<b>\$ 9,022</b>
<b>TOTAL</b>	<b>293,125</b>	<b>944.3</b>	<b>3091.6</b>	<b>\$ 10,547</b>

**Graph 4.**  
**Rate per 100,000 for Injury Related Hospitalizations,**  
**by Intent Underlying Injury, Wisconsin, 1994-1999**



**Graph 5.**  
**Percent of All Injury Related Hospitalizations,**  
**by Intent Underlying Injury, Wisconsin, 1994-1998**



**Table 4.****Number of Injury Related Hospitalizations by Source of Admission  
and Type of Discharge, by Year, Wisconsin, 1994-1999**

	1994	1995	1996	1997	1998	1999	Total
<b>Source of Admission</b>							
Emergency Room	29,886	31,941	31,254	30,483	29,923	29,929	183,416
Acute Care Facility	2,660	2,941	2,942	2,970	2,773	2,970	17,256
Other	15,659	16,896	15,233	15,253	14,631	14,781	92,453
<b>Discharge Status</b>							
Home	34,771	36,093	33,270	31,998	30,706	30,362	197,200
Short Term Hospital	1,637	1,763	1,665	1,669	1,554	1,612	9,900
Institution/Facility	10,844	12,835	13,456	14,038	14,042	14,594	79,809
Died	953	1,087	1,038	1,001	1,025	1,112	6,216
<b>Total</b>	<b>48,205</b>	<b>51,778</b>	<b>49,429</b>	<b>48,706</b>	<b>47,327</b>	<b>47,680</b>	<b>293,125</b>

Chart 6.  
Source of Admission for Injury Related Hospitalizations,  
by Year, Wisconsin, 1994-1999

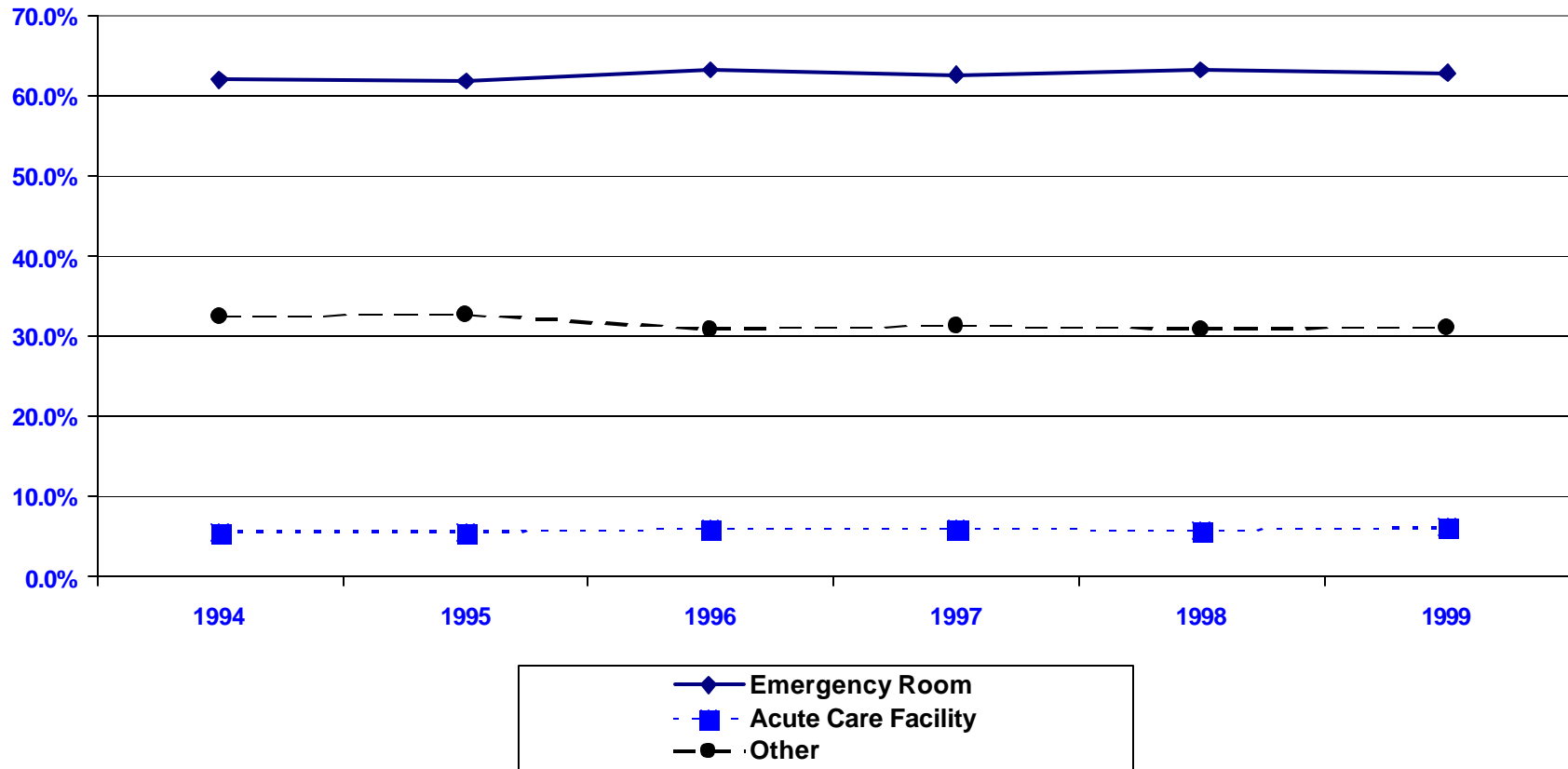
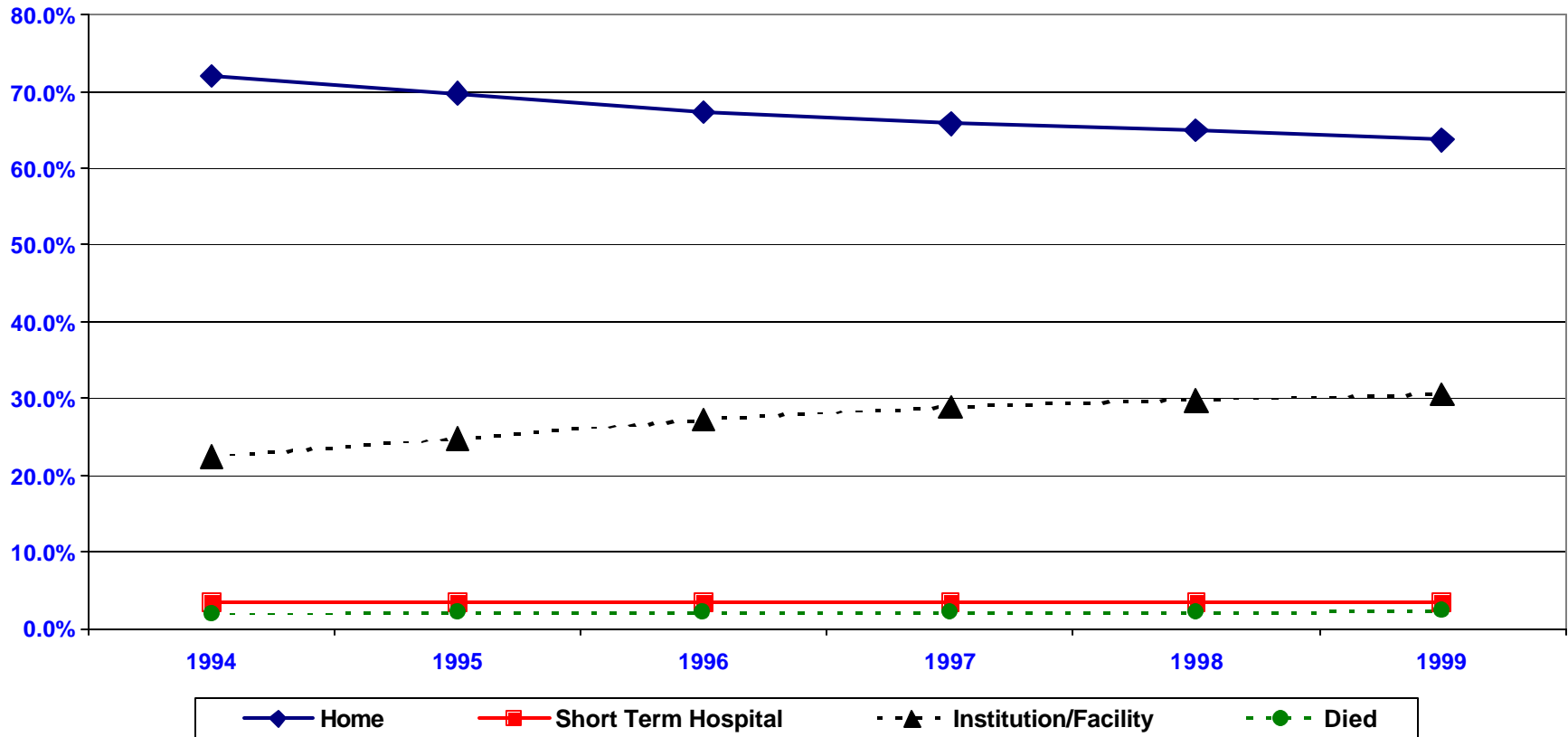


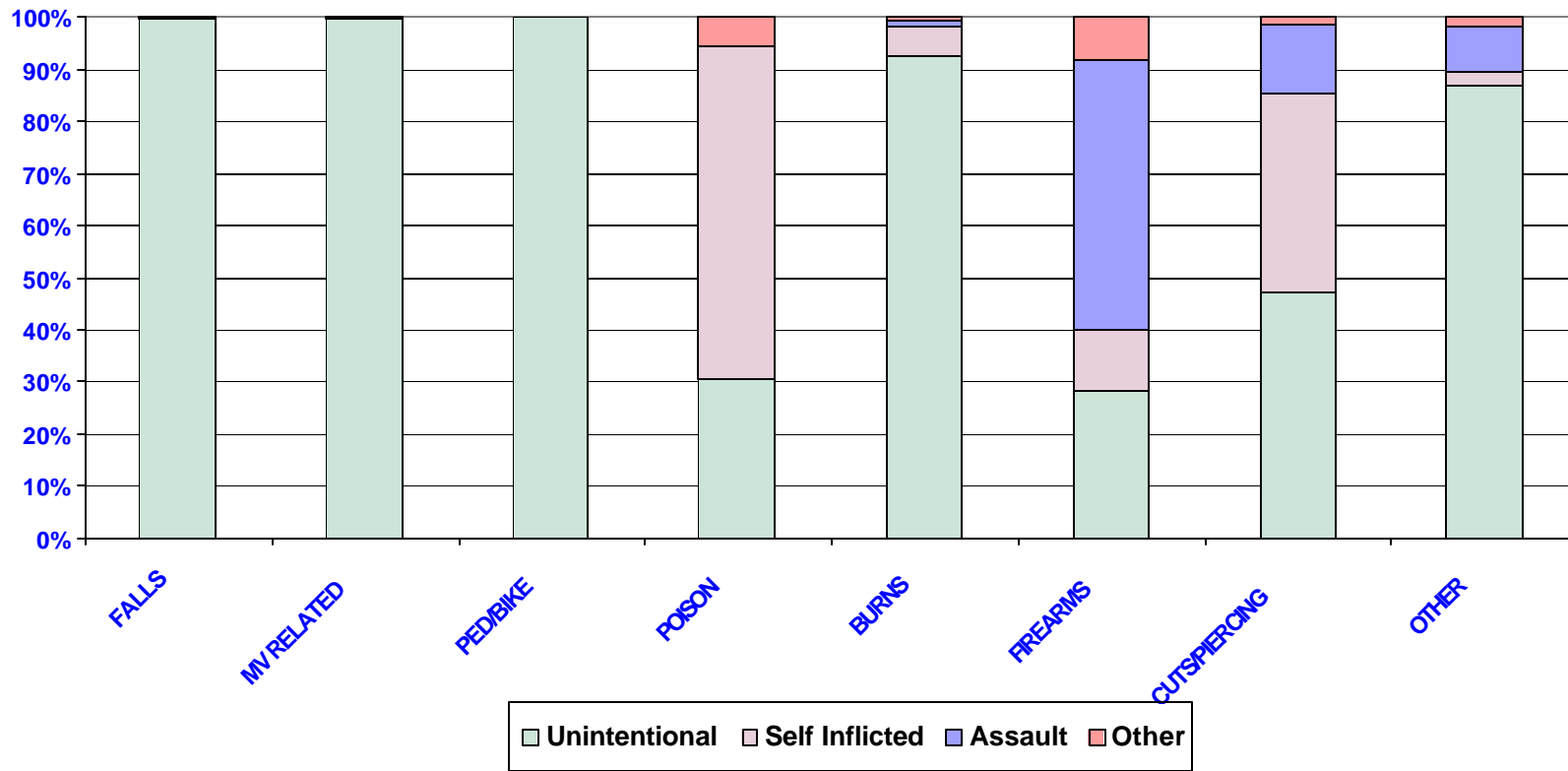
Chart 7.  
Percentage of Persons Discharged Home, to a Hospital, another Institution or Who Died,  
for Injury Related Hospitalizations, by Year, Wisconsin, 1994-1999



**Table 5.**  
**Type of Injury and Underlying Intent for**  
**Injury Related Hospitalizations, Wisconsin, 1994-1999**

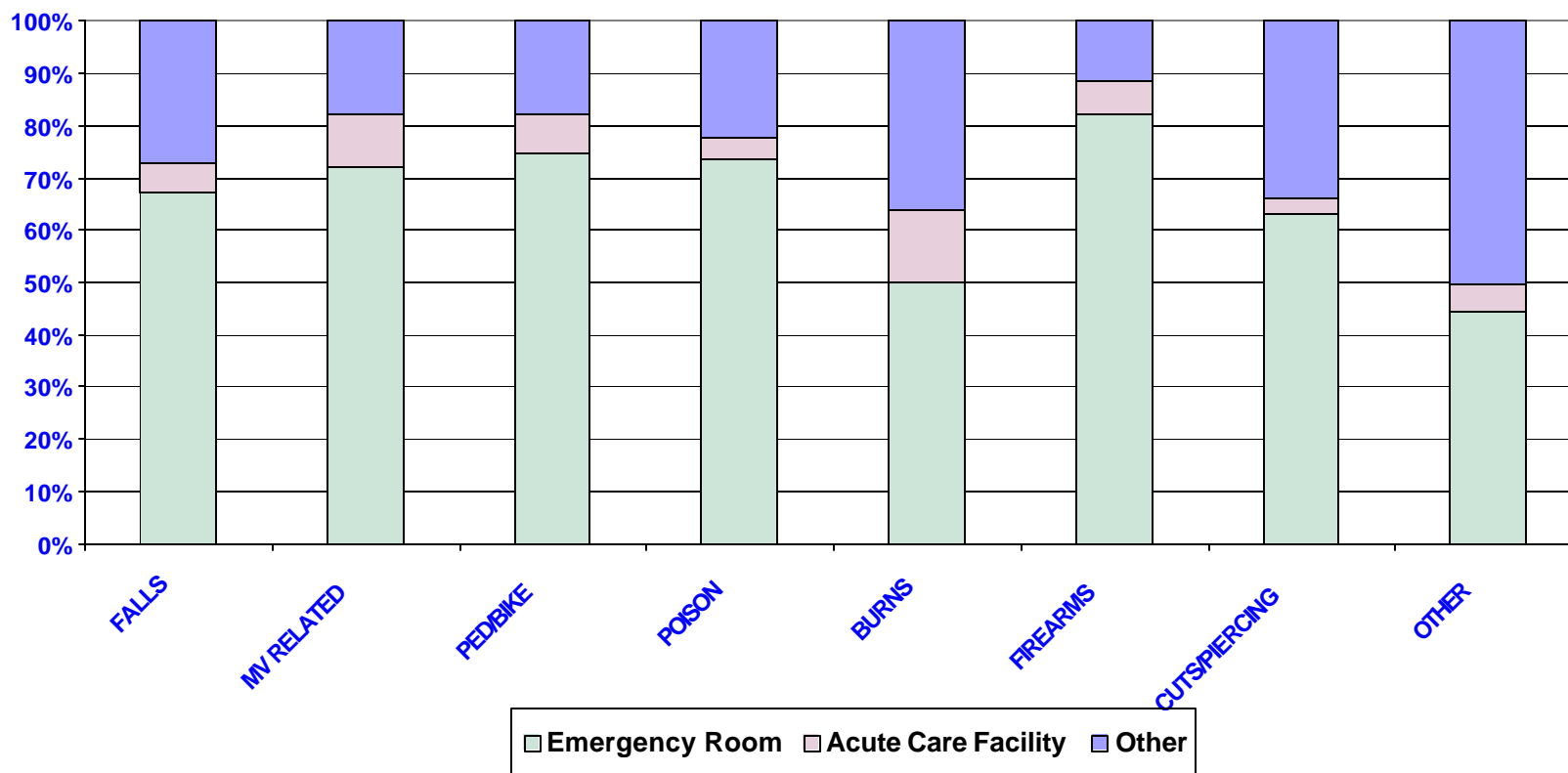
		<b>Self</b>		
	<b>Unintentional</b>	<b>Inflicted</b>	<b>Assault</b>	<b>Other</b>
<b>FALLS</b>	125,377	108	37	108
<b>MV RELATED</b>	35,009	70	8	2
<b>PED/BIKE</b>	6,556	0	0	0
<b>POISON</b>	9,920	20,511	21	1,769
<b>BURNS</b>	3,816	228	60	27
<b>FIREARMS</b>	942	384	1,703	273
<b>CUTS/PIERCING</b>	4,558	3,710	1,293	138
<b>OTHER</b>	66,457	1,963	6,570	1,507
<b>TOTAL</b>	252,635	26,974	9,692	3,824

**Chart 8.**  
**Percent of Cases for Injury Related Hospitalizations,**  
**by Type of Injury and Underlying Intent, Wisconsin, 1994-1999**



<b>Table 6.</b>			
<b>Type of Injury and Source of Admission for Injury Related Hospitalizations, Wisconsin, 1994-1999</b>			
	<b>Emergency Room</b>	<b>Short Term Hospital</b>	<b>Other</b>
<b>FALLS</b>	84,595	6,815	34,220
<b>MV RELATED</b>	25,331	3,510	6,248
<b>PED/BIKE</b>	4,887	497	1,172
<b>POISON</b>	23,707	1,335	7,179
<b>BURNS</b>	2,060	577	1,494
<b>FIREARMS</b>	2,704	222	376
<b>CUTS/PIERCING</b>	6,125	272	3,302
<b>OTHER</b>	34,007	4,028	38,462
<b>TOTAL</b>	183,416	17,256	92,453

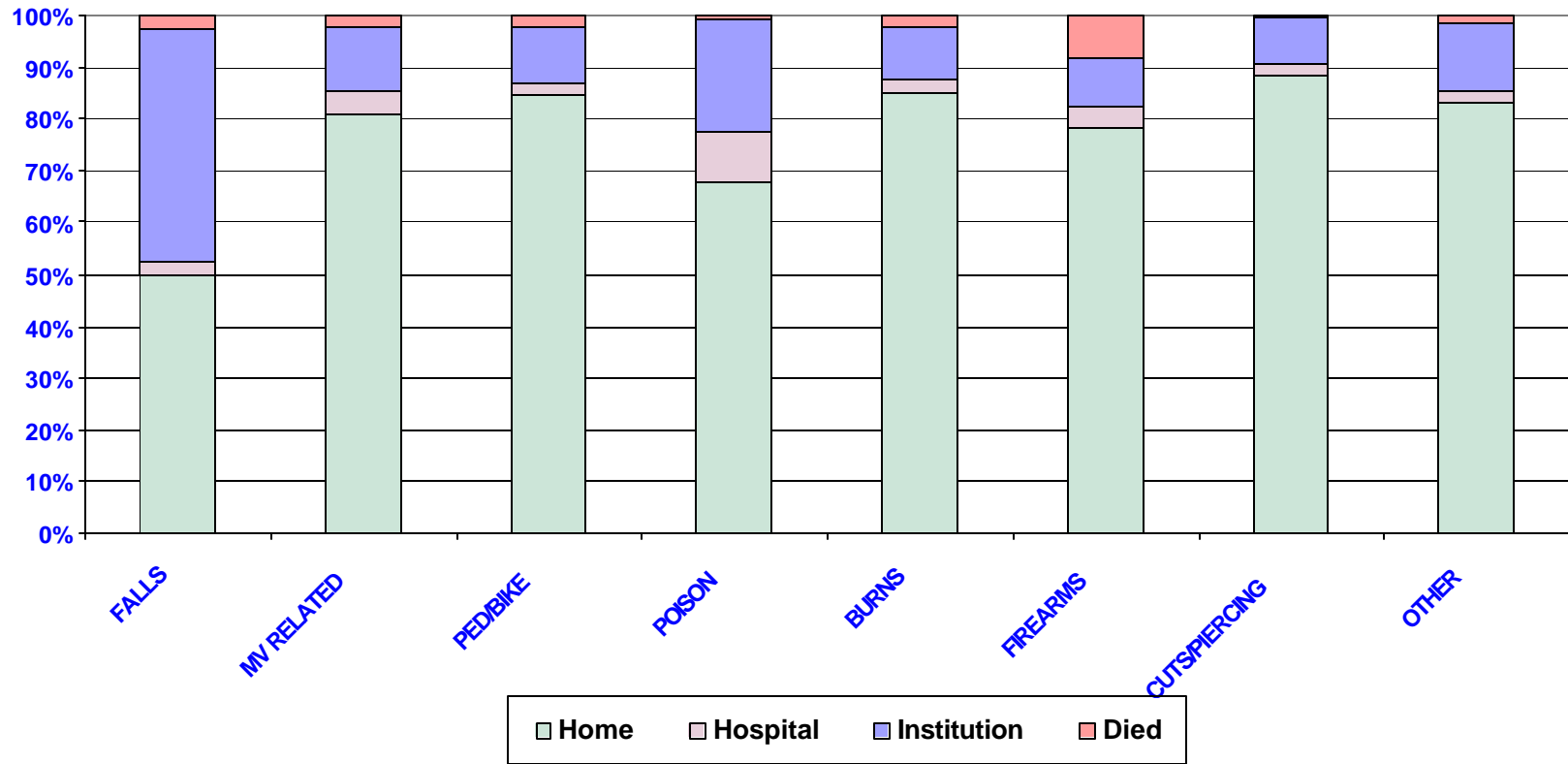
**Chart 9.**  
**Percent of Cases for Injury Related Hospitalizations,**  
**by Type of Injury and Source of Admission, Wisconsin, 1994-1999**



**Table 7.**  
**Type of Injury and Discharge Status for**  
**Injury Related Hospitalizations, Wisconsin, 1994-1999**

	Home	Hospital	Institution	Died
<b>FALLS</b>	62,938	3,121	56,205	3,366
<b>MV RELATED</b>	28,388	1,567	4,360	774
<b>PED/BIKE</b>	5,542	151	708	155
<b>POISON</b>	21,919	3,061	6,997	244
<b>BURNS</b>	3,512	110	418	91
<b>FIREARMS</b>	2,593	131	313	265
<b>CUTS/PIERCING</b>	8,584	203	869	43
<b>OTHER</b>	63,724	1,556	9,939	1,278
<b>TOTAL</b>	197,200	9,900	79,809	6,216

Chart 10.  
 Percent of Cases for Injury Related Hospitalizations,  
 by Type of Injury and Discharge Status, Wisconsin, 1994-1999

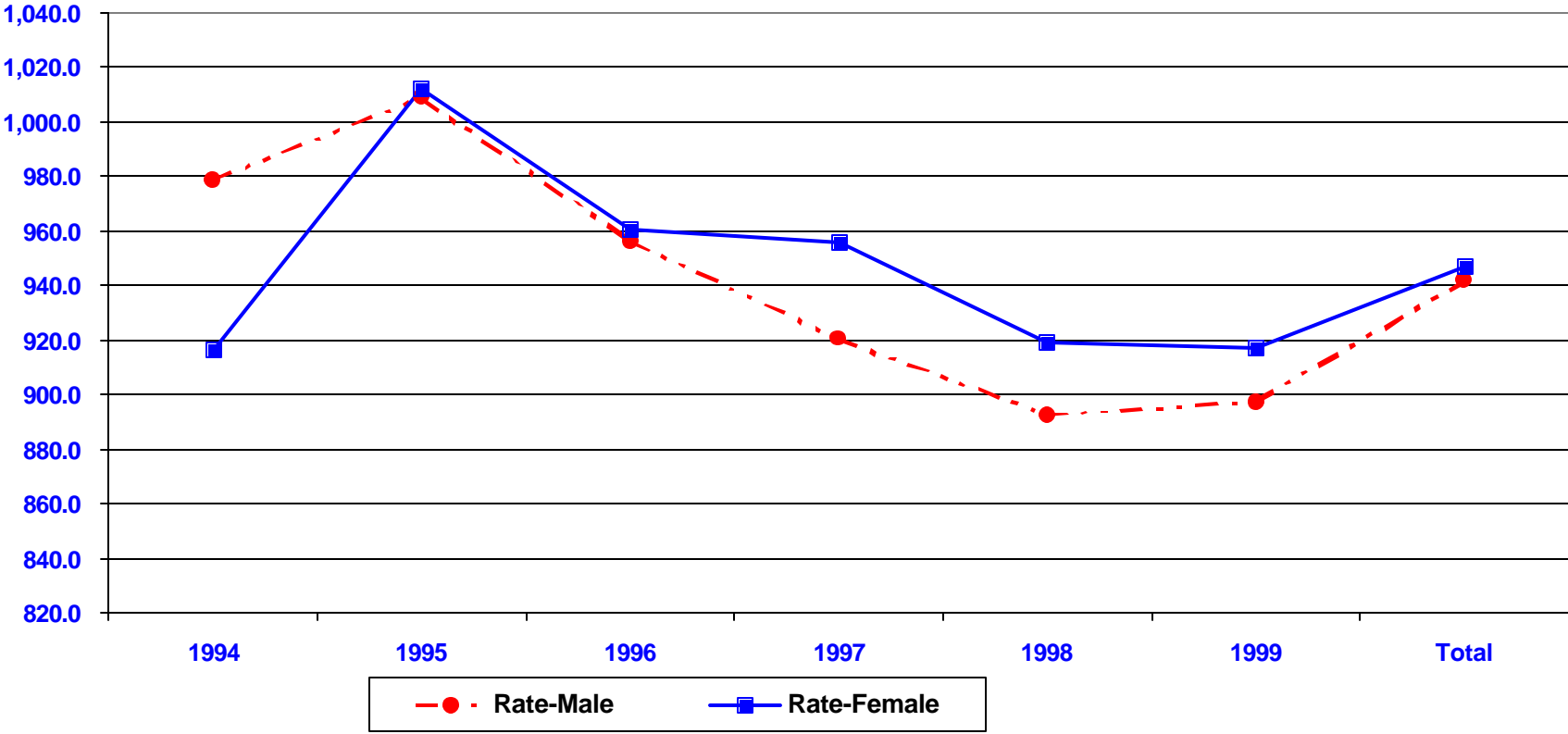




**Chart 6.**  
**Number of Injury Related Hospitalizations,**  
**by Sex and Year, Wisconsin, 1994-1998**



Graph 7.  
Rate per 100,000 of Injury Related Hospitalizations,  
by Sex and Year, Wisconsin, 1994-1999



**Table 8.**  
**Number of Injury Related Hospitalizations,**  
**by Age and Sex, Wisconsin, 1994-1999**

	Female	Male	Total
<b>0-4</b>	3,406	4,661	8,067
<b>5-9</b>	2,066	3,488	5,554
<b>10-14</b>	3,515	4,953	8,468
<b>15-19</b>	8,335	11,120	19,455
<b>20-24</b>	5,768	10,212	15,980
<b>25-34</b>	12,853	20,451	33,304
<b>35-44</b>	14,315	22,532	36,847
<b>45-54</b>	10,618	15,541	26,159
<b>55-64</b>	9,527	11,605	21,132
<b>65-74</b>	17,446	13,331	30,777
<b>75+</b>	62,136	25,336	87,472
<b>TOTAL</b>	149,985	143,230	293,215

<b>Table 9.</b>			
<b>Rate per 100,000 Population for Injury Related Hospitalizations, by Age and Sex, Wisconsin, 1994-1999</b>			
	<b>Female</b>	<b>Male</b>	<b>Total</b>
<b>0-4</b>	321	419	371
<b>5-9</b>	184	296	241
<b>10-14</b>	305	411	359
<b>15-19</b>	755	961	860
<b>20-24</b>	563	975	772
<b>25-34</b>	577	925	751
<b>35-44</b>	578	913	745
<b>45-54</b>	554	813	684
<b>55-64</b>	719	927	820
<b>65-74</b>	1,489	1,365	1,433
<b>75+</b>	4,951	3,684	4,502
<b>TOTAL</b>	947.1	941.8	944.5

**Chart 11.**  
**Number of Injury Related Hospitalizations,**  
**by Age and Sex, Wisconsin, 1994-1999**

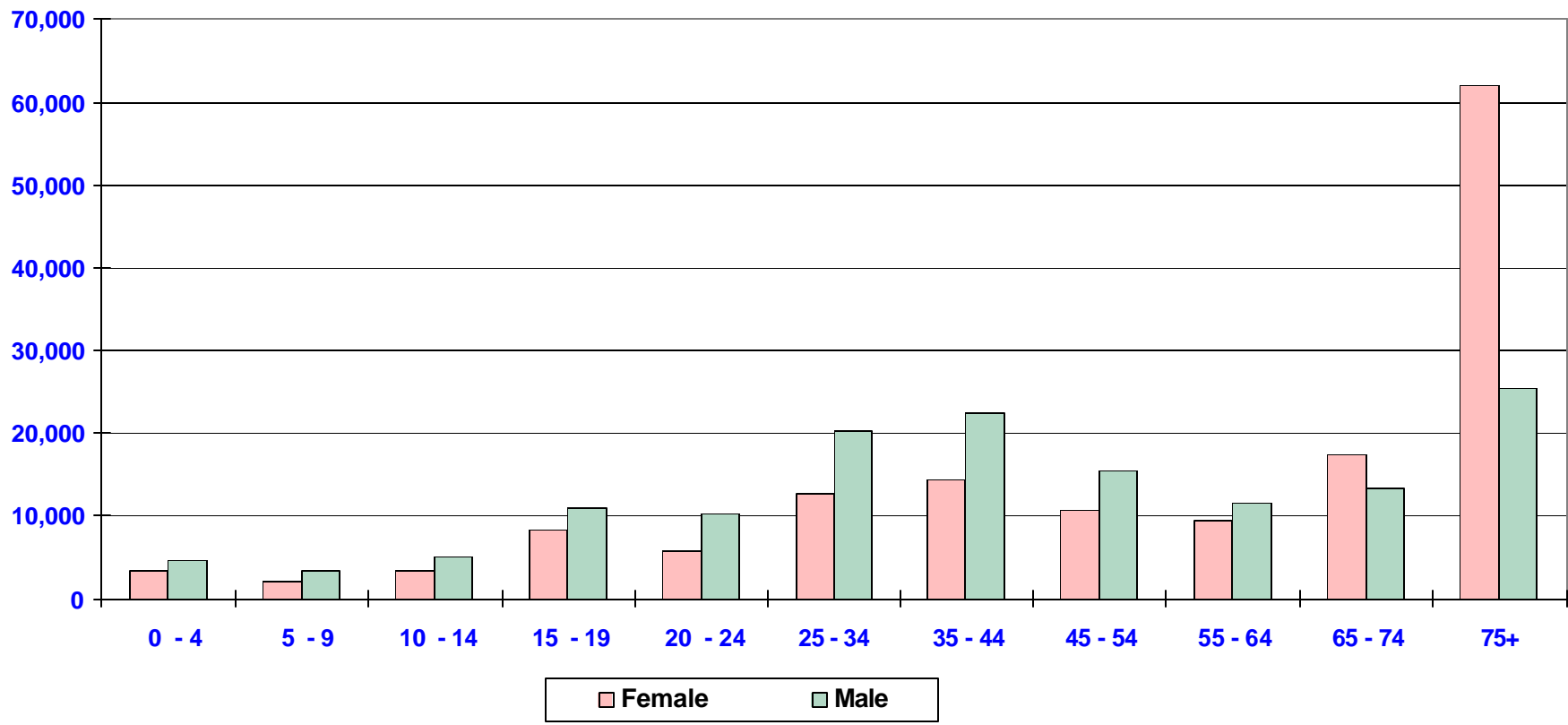


Chart 12.  
Rate per 100,000 Population for Injury Related Hospitalizations,  
by Age and Sex, Wisconsin, 1994-1999

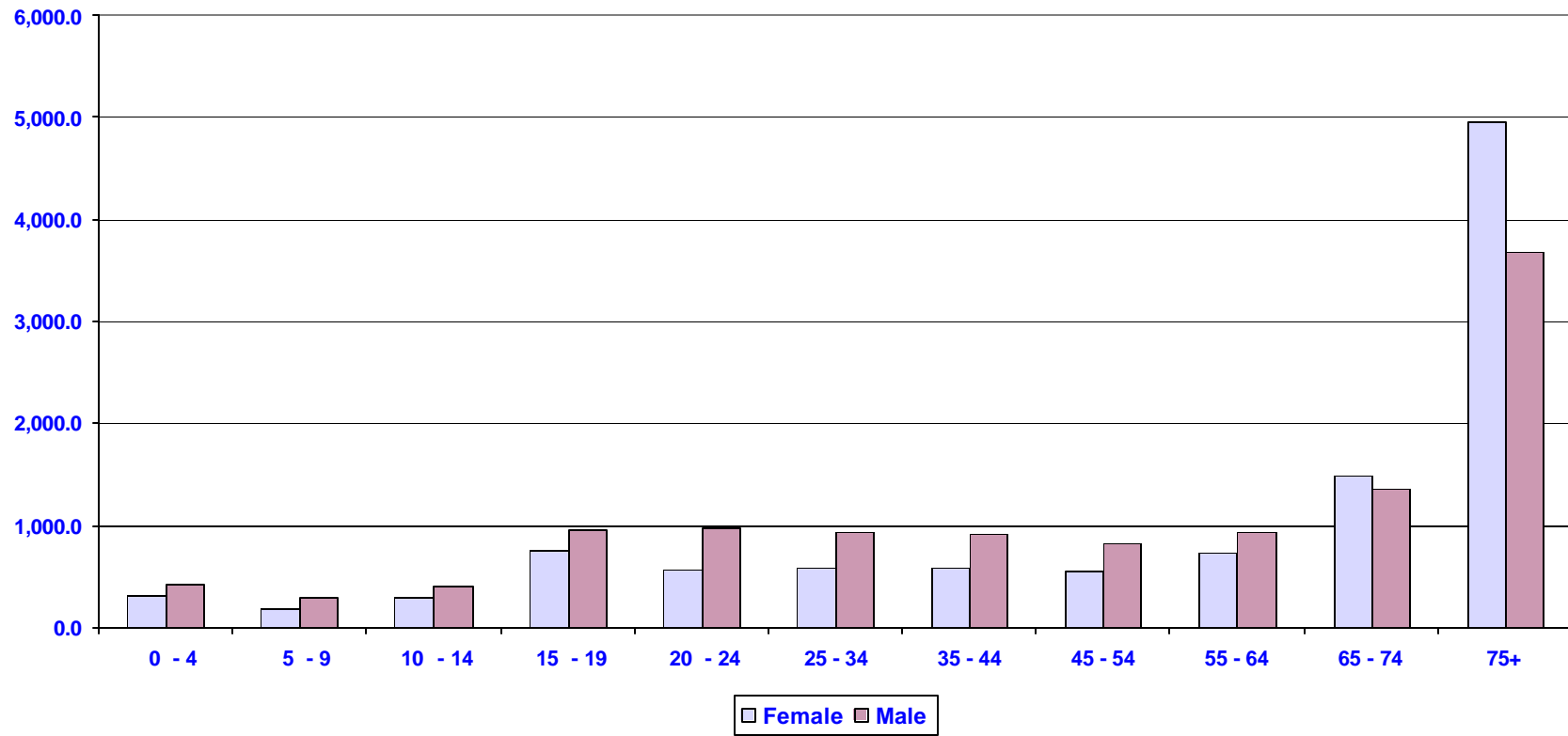
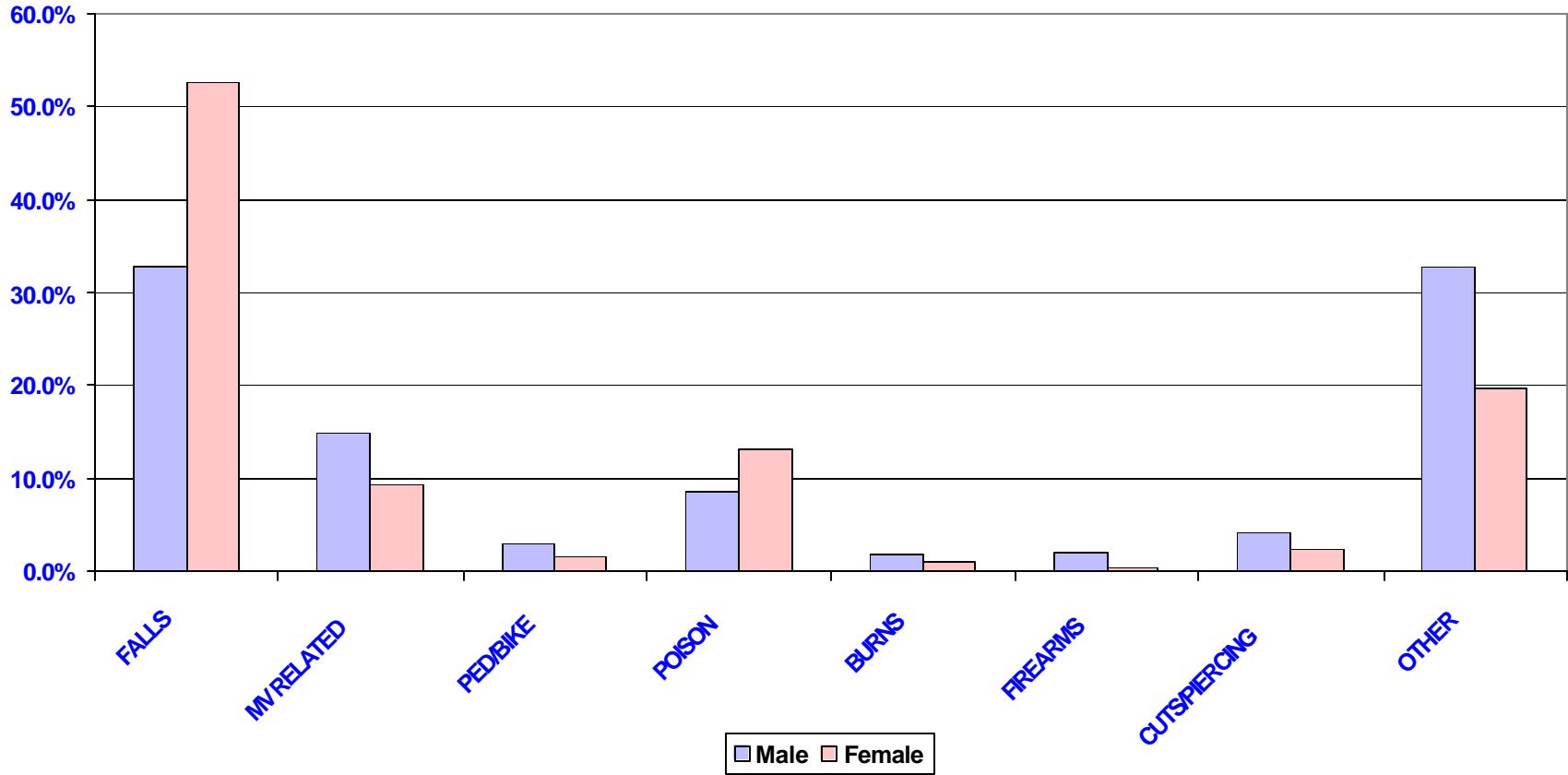


Chart 13.  
Percent of Injury Related Hospitalizations for Type of Injury,  
by Sex, Wisconsin, 1994-1999



**Chart 14.**  
**Percent of Injury Related Hospitalizations by Underlying Intent for Injury,**  
**by Sex, Wisconsin, 1994-1999**

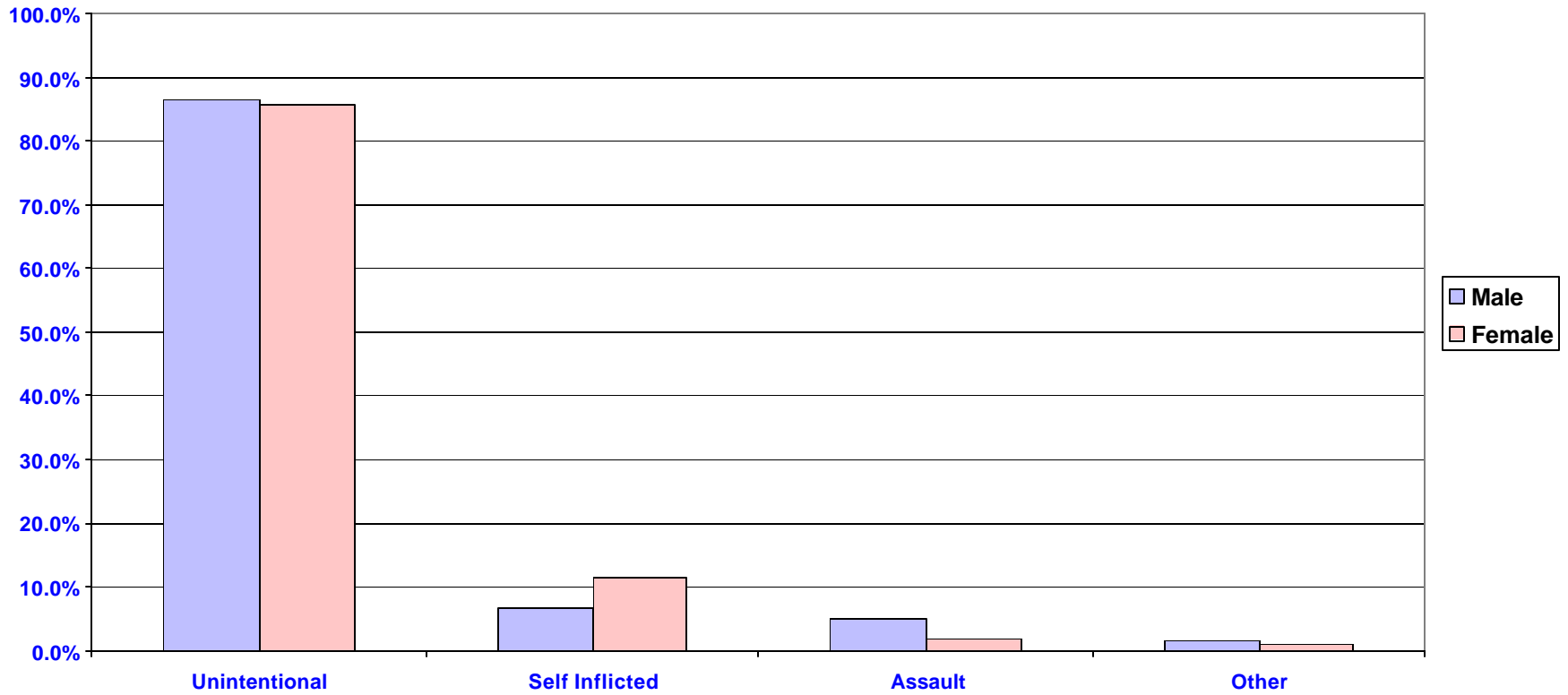


Chart 15.  
Percent of Injury Related Hospitalizations by Underlying Intent of Injury,  
by Age, Wisconsin, 1994-1999

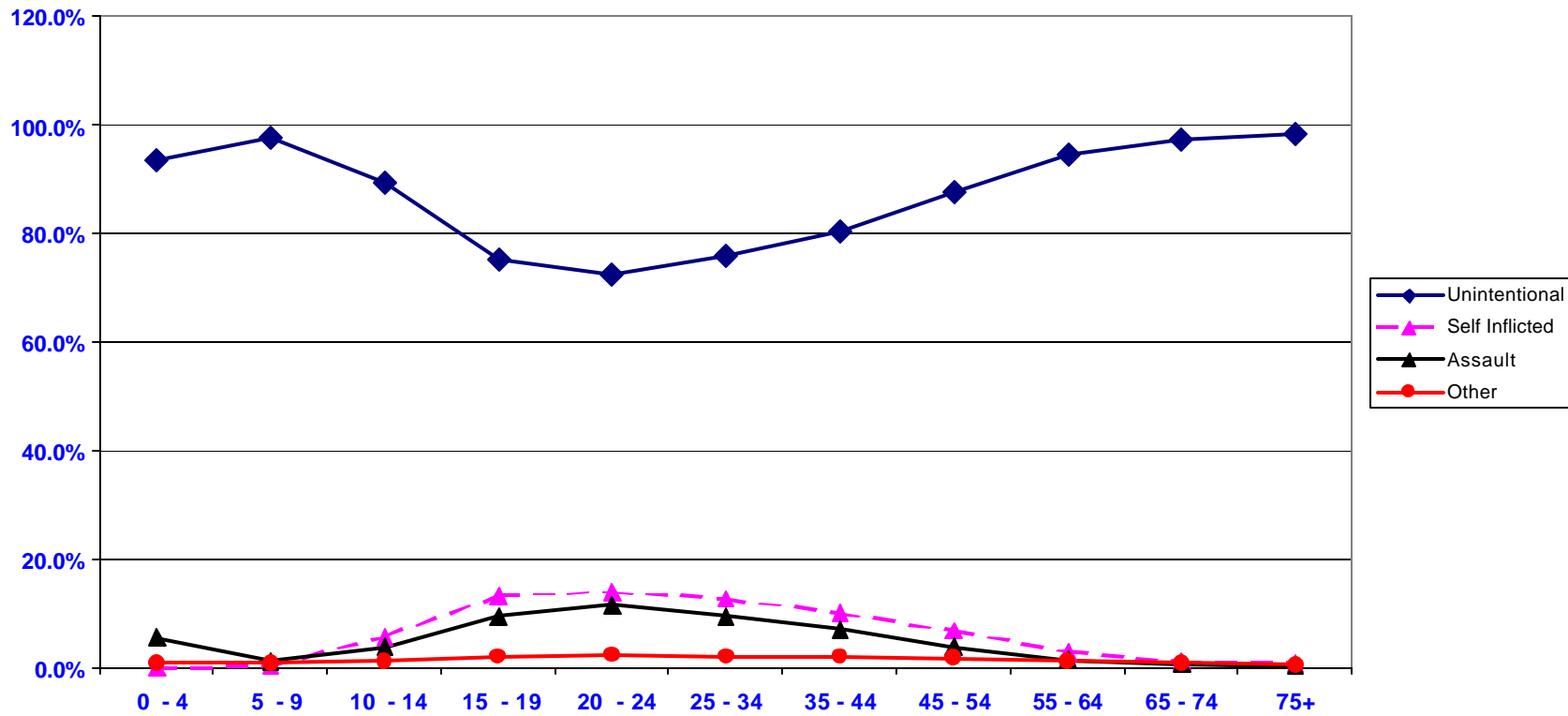


Chart 16.  
 Percentage of Injury Related Hospitalizations by Type of Injury,  
 by Age, Wisconsin, 1994-1999

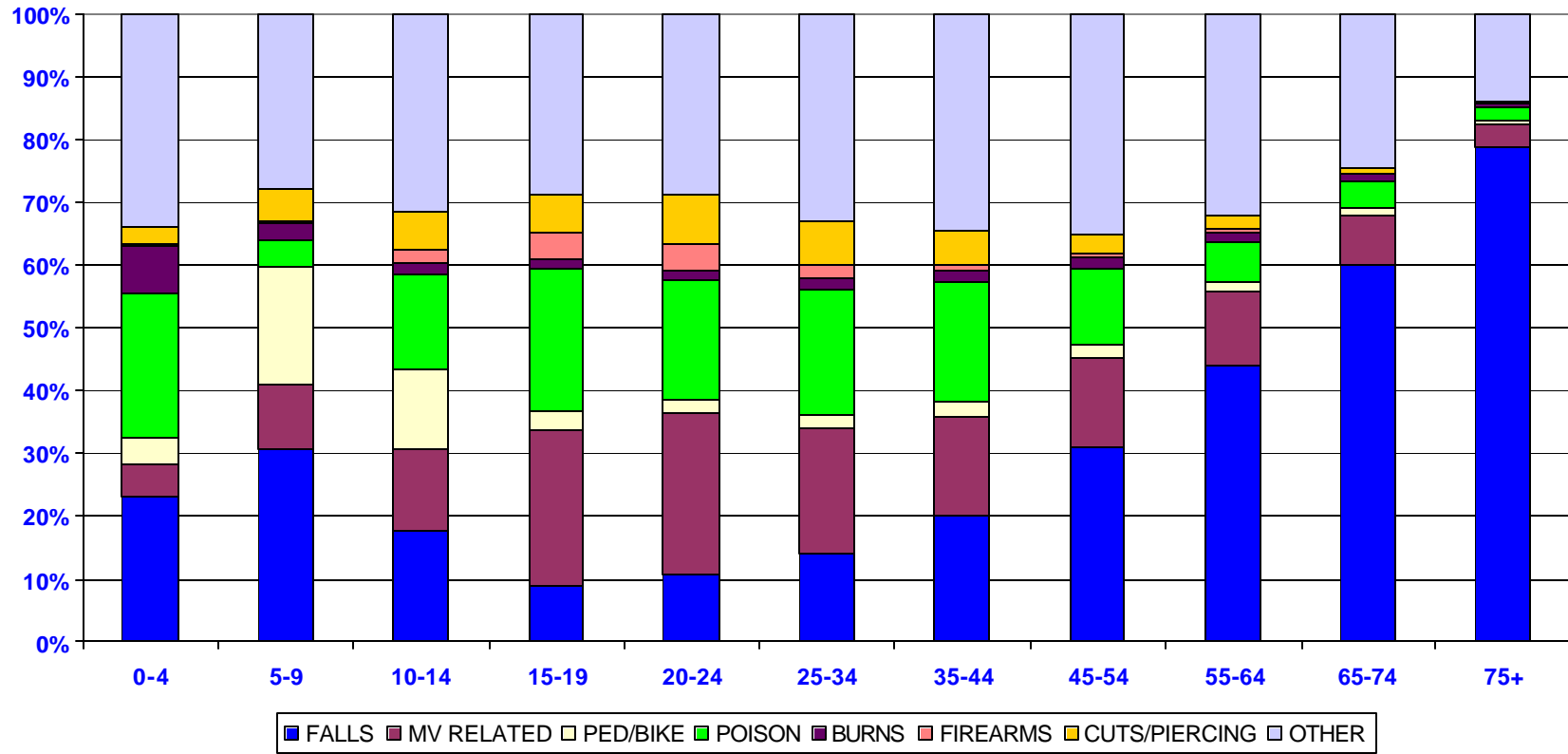


Chart 17.  
Percentage of Age Specific Types of Injuries for  
Injury Related Hospitalizations, Wisconsin, 1994-1999

