

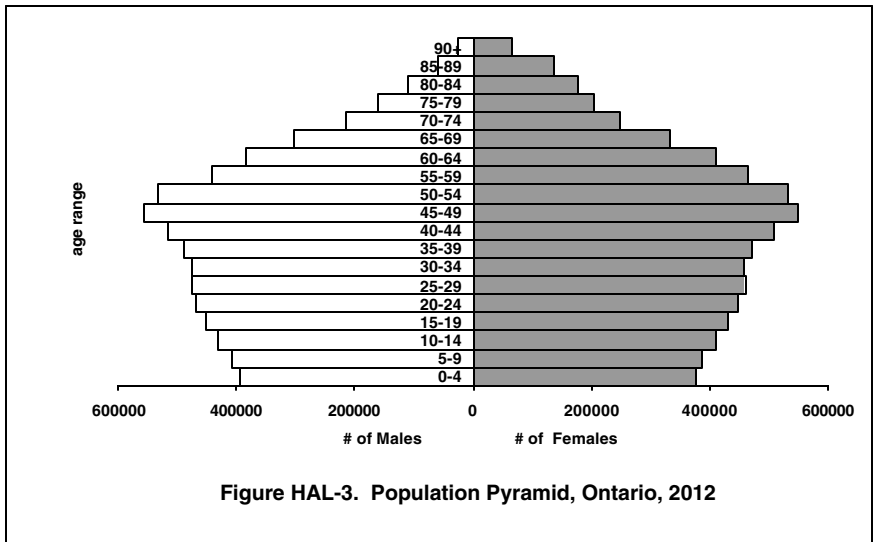
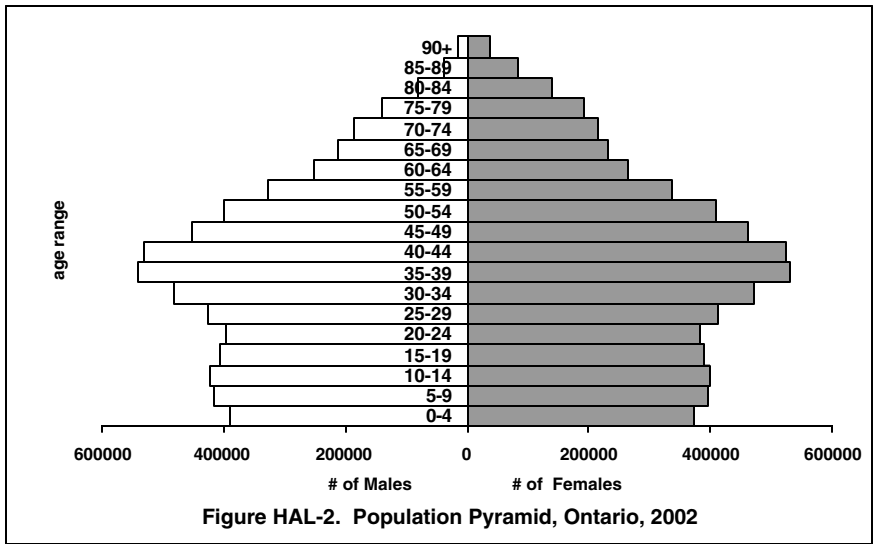
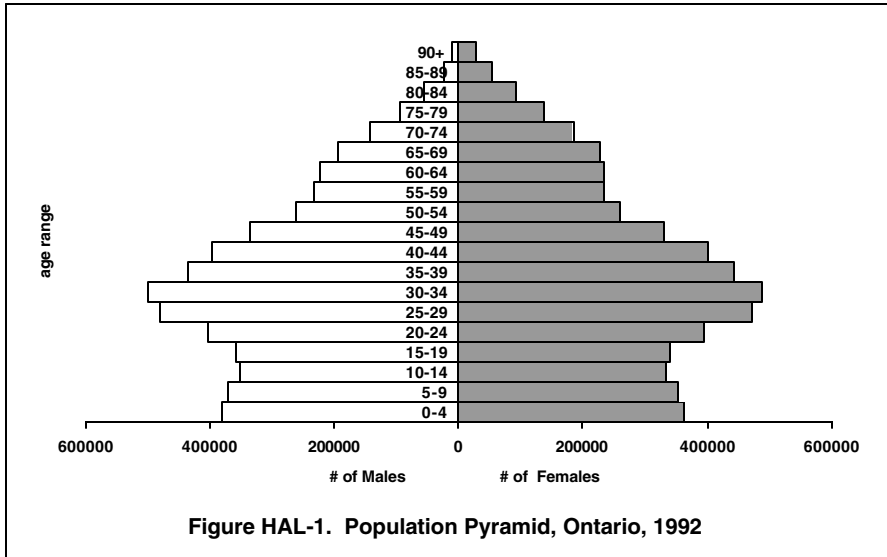
# Halton Region

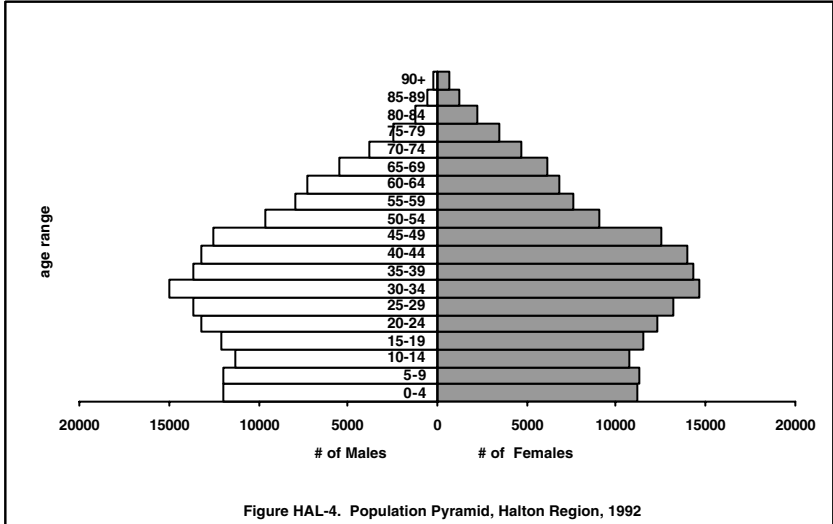
**Notes, Definitions & Formulas**

Population Pyramids present the age sex composition of a population. They may present either absolute numbers or percents.

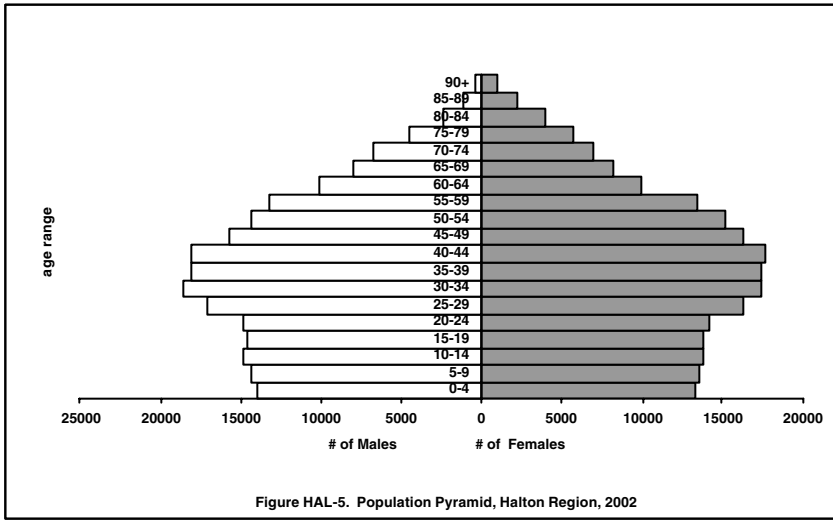
The age of an individual is taken to be the age as of their last birthday (as of census reference date, May 14<sup>th</sup>, 1996), and is derived from the date of birth.

The sources for the population data are the census and HELPS.

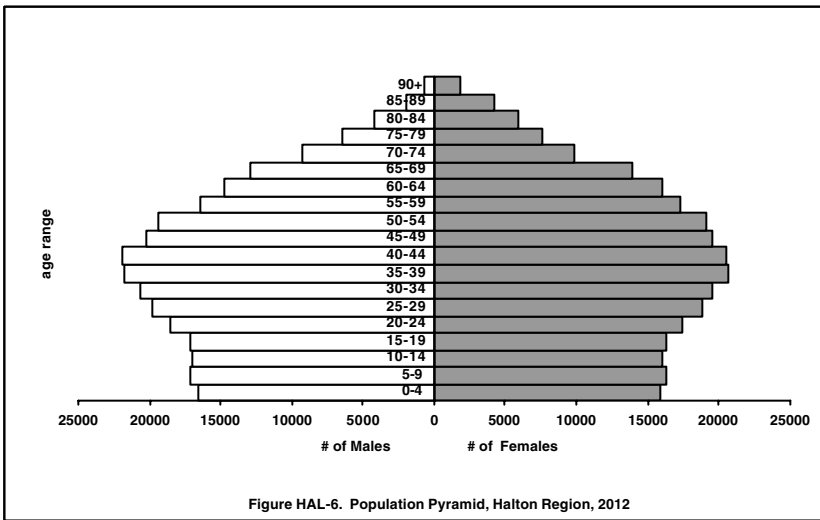




% of total population		
Age	Male	Female
0-4	3.57	3.35
5-9	3.56	3.38
10-14	3.38	3.22
15-19	3.59	3.43
20-24	3.93	3.66
25-29	4.07	3.94
30-34	4.47	4.40
35-39	4.09	4.29
40-44	3.95	4.17
45-49	3.73	3.76
50-54	2.88	2.71
55-59	2.35	2.26
60-64	2.16	2.06
65-69	1.65	1.86
70-74	1.14	1.43
75-79	0.74	1.04
80-84	0.36	0.65
85-89	0.17	0.38
90+	0.07	0.19



% of total population		
Age	Male	Female
0-4	3.17	3.02
5-9	3.24	3.08
10-14	3.36	3.14
15-19	3.32	3.14
20-24	3.36	3.22
25-29	3.86	3.69
30-34	4.22	3.94
35-39	4.11	3.94
40-44	4.10	4.01
45-49	3.57	3.70
50-54	3.27	3.45
55-59	2.98	3.06
60-64	2.28	2.24
65-69	1.80	1.85
70-74	1.51	1.58
75-79	1.00	1.29
80-84	0.55	0.89
85-89	0.24	0.52
90+	0.08	0.22



% of total population		
Age	Male	Female
0-4	3.00	2.87
5-9	3.09	2.94
10-14	3.06	2.90
15-19	3.09	2.93
20-24	3.34	3.14
25-29	3.59	3.41
30-34	3.72	3.53
35-39	3.93	3.74
40-44	3.96	3.71
45-49	3.66	3.52
50-54	3.49	3.44
55-59	2.96	3.12
60-64	2.66	2.89
65-69	2.33	2.52
70-74	1.68	1.79
75-79	1.16	1.37
80-84	0.76	1.08
85-89	0.35	0.76
90+	0.14	0.34

**Table HAL-1:  
Population Projections by Age Group, Halton Region, 1992-2012**

<b>Age Group</b>	<b>1992 Census</b>	<b>2002 (projection)</b>	<b>2012 (projection)</b>	<b>% change 92 - 12</b>
<b>Halton</b>				
0-4	23154	27290	32521	40.5%
5-9	23223	27896	33389	43.8%
10-14	22065	28682	33072	49.9%
15-19	23490	28479	33365	42.0%
20-24	25399	29046	35916	41.4%
25-29	26818	33341	38751	44.5%
30-34	29675	35979	40188	35.4%
35-39	28023	35497	42503	51.7%
40-44	27158	35813	42500	56.5%
45-49	25053	32059	39812	58.9%
50-54	18690	29641	38436	105.7%
55-59	15435	26655	33727	118.5%
60-64	14112	19976	30726	117.7%
65-69	11737	16129	26892	129.1%
70-74	8591	13649	19229	123.8%
75-79	5972	10148	14069	135.6%
80-84	3386	6363	10204	201.4%
85-89	1811	3350	6129	238.4%
90+	850	1316	2643	210.9%
<b>Total</b>	<b>334650</b>	<b>441317</b>	<b>554080</b>	<b>65.6%</b>
<b>Ontario</b>				
0-4	742471	764732	762254	2.7%
5-9	722556	812650	786305	8.8%
10-14	683755	819316	831546	21.6%
15-19	698690	796693	876496	25.4%
20-24	798841	781014	904407	13.2%
25-29	953484	839052	922849	-3.2%
30-34	987524	952608	921961	-6.6%
35-39	880560	1073145	949162	7.8%
40-44	797548	1056980	1015755	27.4%
45-49	665954	912130	1096884	64.7%
50-54	520678	806558	1055663	102.7%
55-59	467820	664124	898386	92.0%
60-64	456475	513262	783207	71.6%
65-69	419263	444065	627732	49.7%
70-74	327300	402385	459222	40.3%
75-79	231989	332089	361141	55.7%
80-84	147311	222321	284578	93.2%
85-89	75312	120019	191100	153.7%
90+	37508	53274	89947	139.8%
<b>Total</b>	<b>10615475</b>	<b>12366850</b>	<b>13819024</b>	<b>30.2%</b>

**Notes, Definitions & Formulas**

Age dependency ratios take into account the proportions of children, seniors and those of working age and are sometimes used as a measure of economic dependency (i.e. a ratio of the economically inactive population to the active or productive population).

The two dependency ratios presented here are an accepted standard.

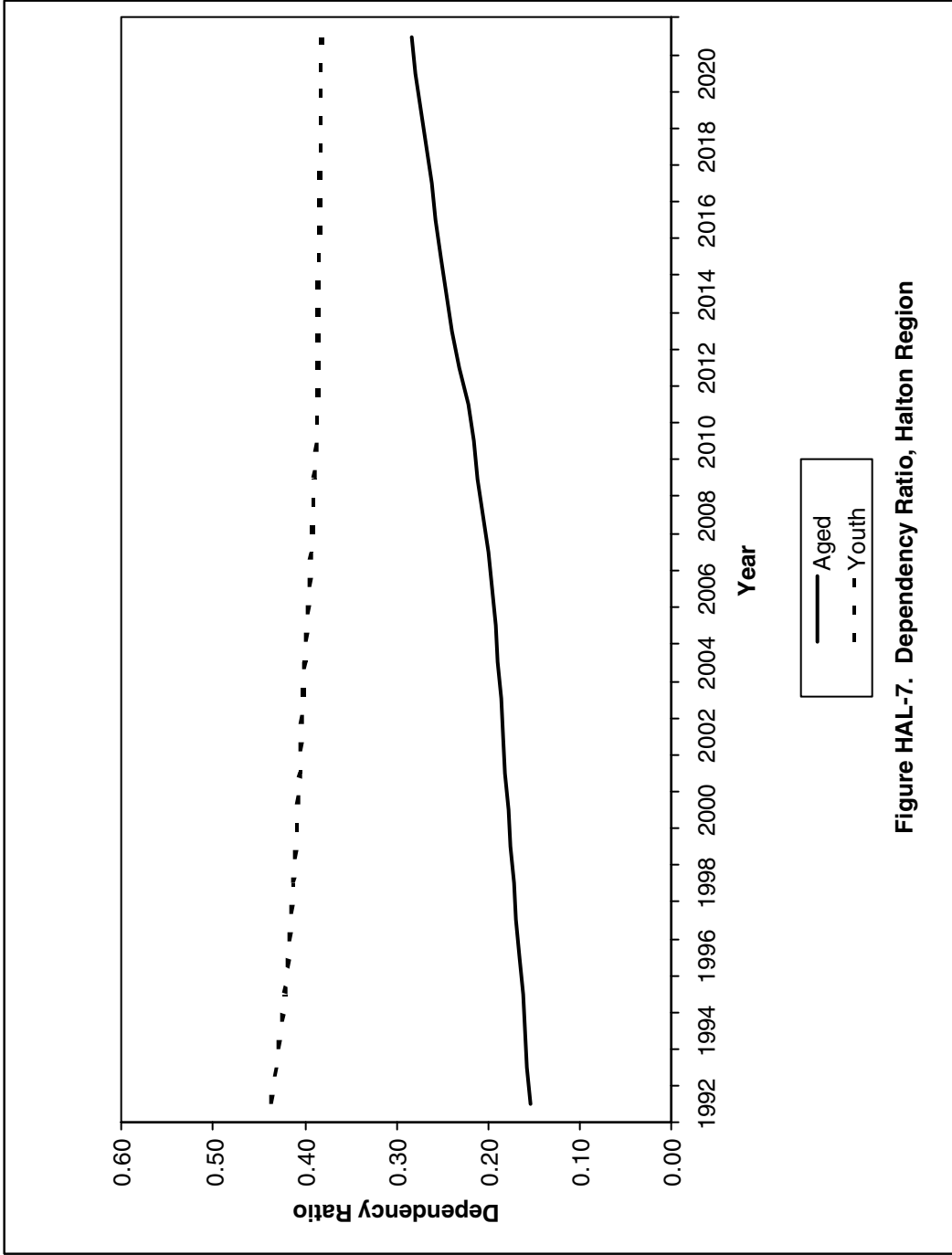
**Calculation**

**Youth dependency ratio**  

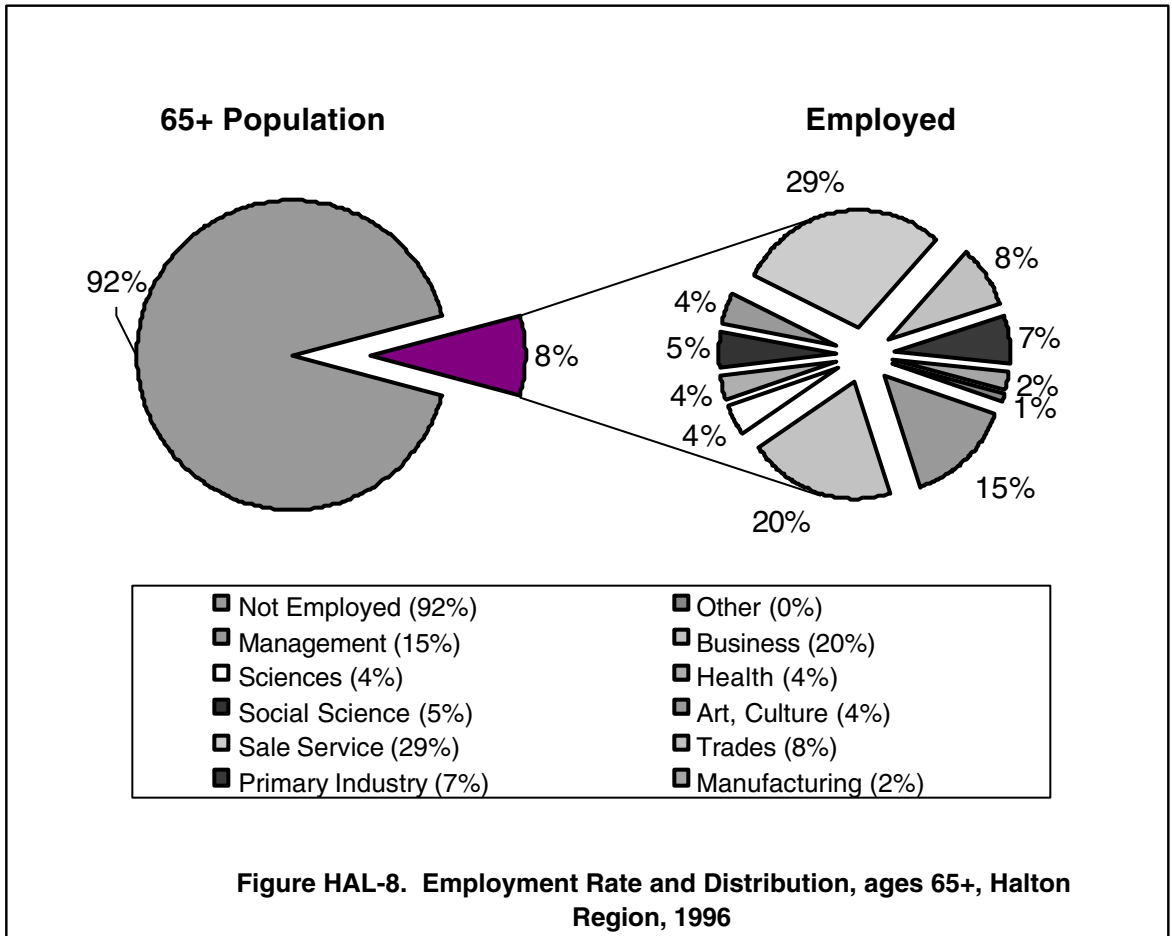
$$\left( \frac{P_{age\ 0-24}}{P_{age\ 25-64}} \right)$$

**Aged dependency ratio**  

$$\left( \frac{P_{age\ 65+}}{P_{age\ 25-64}} \right)$$



**Figure HAL-7. Dependency Ratio, Halton Region**



**Table HAL-2:  
Job Classification Distribution, Halton Region, 1996**

	Ontario	Ontario 65+	Halton 65+
Management	7.14%	0.18%	1.36%
Business	13.30%	0.30%	1.87%
Sciences	2.79%	0.07%	0.39%
Health	4.32%	0.07%	0.31%
Social Science	4.71%	0.10%	0.45%
Art, culture	1.47%	0.07%	0.40%
Sale Service	20.51%	0.42%	2.70%
Trades	17.65%	0.14%	0.76%
Primary Industry	14.43%	0.13%	0.60%
Manufacturing	11.61%	0.09%	0.23%
Other	2.81%	0.04%	0.10%

Source: The Canadian Census, 1996 (20% Sample)

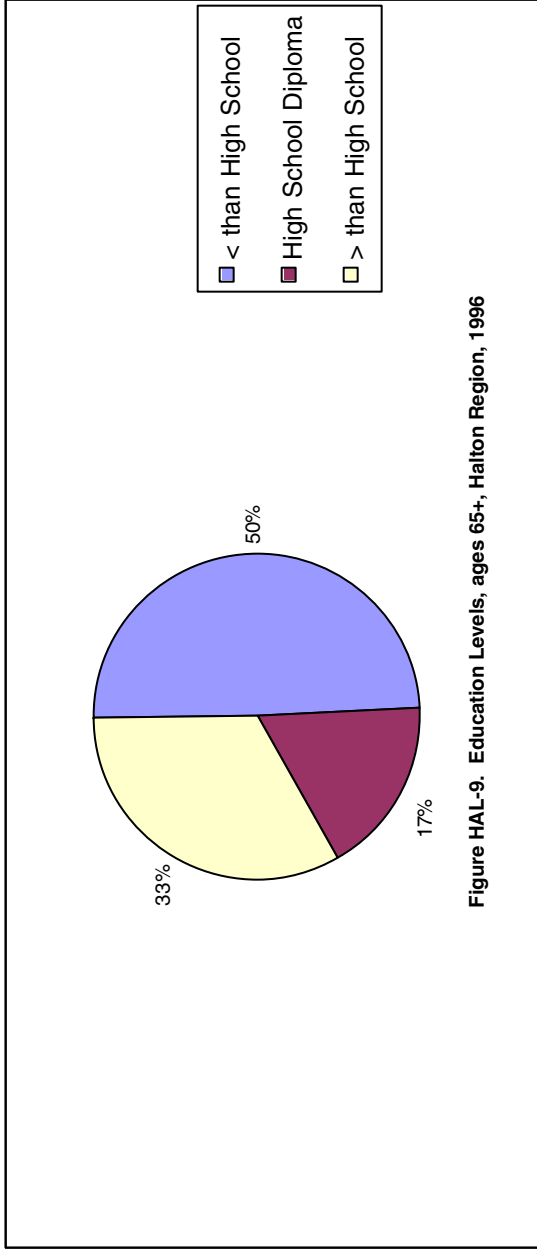


Figure HAL-9. Education Levels, ages 65+, Halton Region, 1996

**Table HAL-3:  
Highest Level of Education, Halton Region, 1996**

Highest Education Achieved	Ontario	Ontario 65+	Halton 65+
No degree, certificate or diploma	35.04%	60.58%	49.13%
Secondary (high) school graduation certificate	23.80%	14.69%	17.43%
Trades certificate or diploma	9.36%	8.52%	9.96%
Other non-university certificate or diploma	14.95%	7.59%	11.23%
University certificate or diploma below bachelor level	1.92%	1.96%	2.86%
Bachelor's degree	9.55%	3.71%	5.61%
University certificate or diploma above bachelor level	1.75%	0.88%	1.16%
Medical degree	0.50%	0.47%	0.54%
Master's degree	2.63%	1.18%	1.63%
Earned doctorate	0.51%	0.43%	0.45%

Source: The Canadian Census, 1996 (20% Sample)

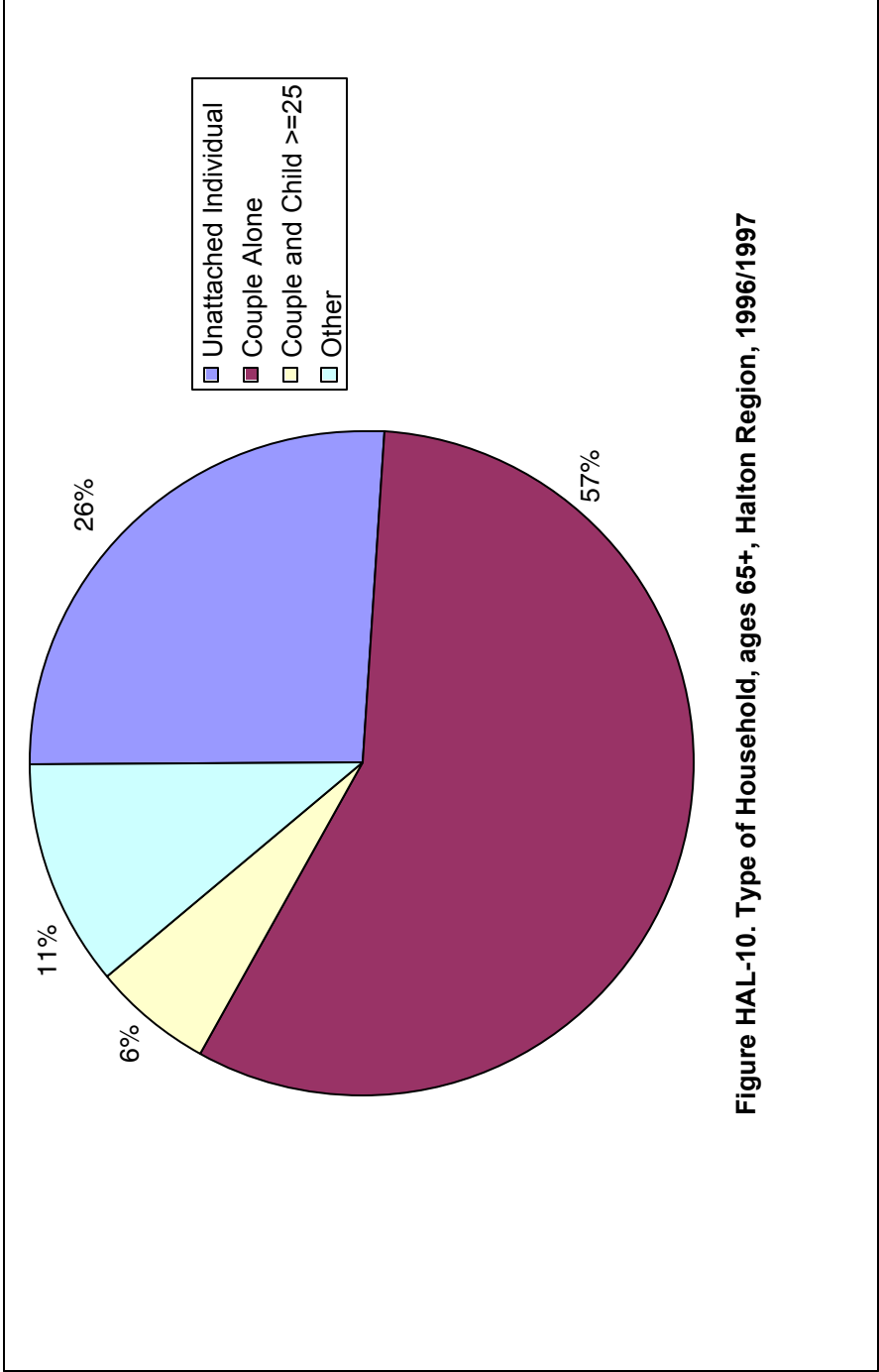


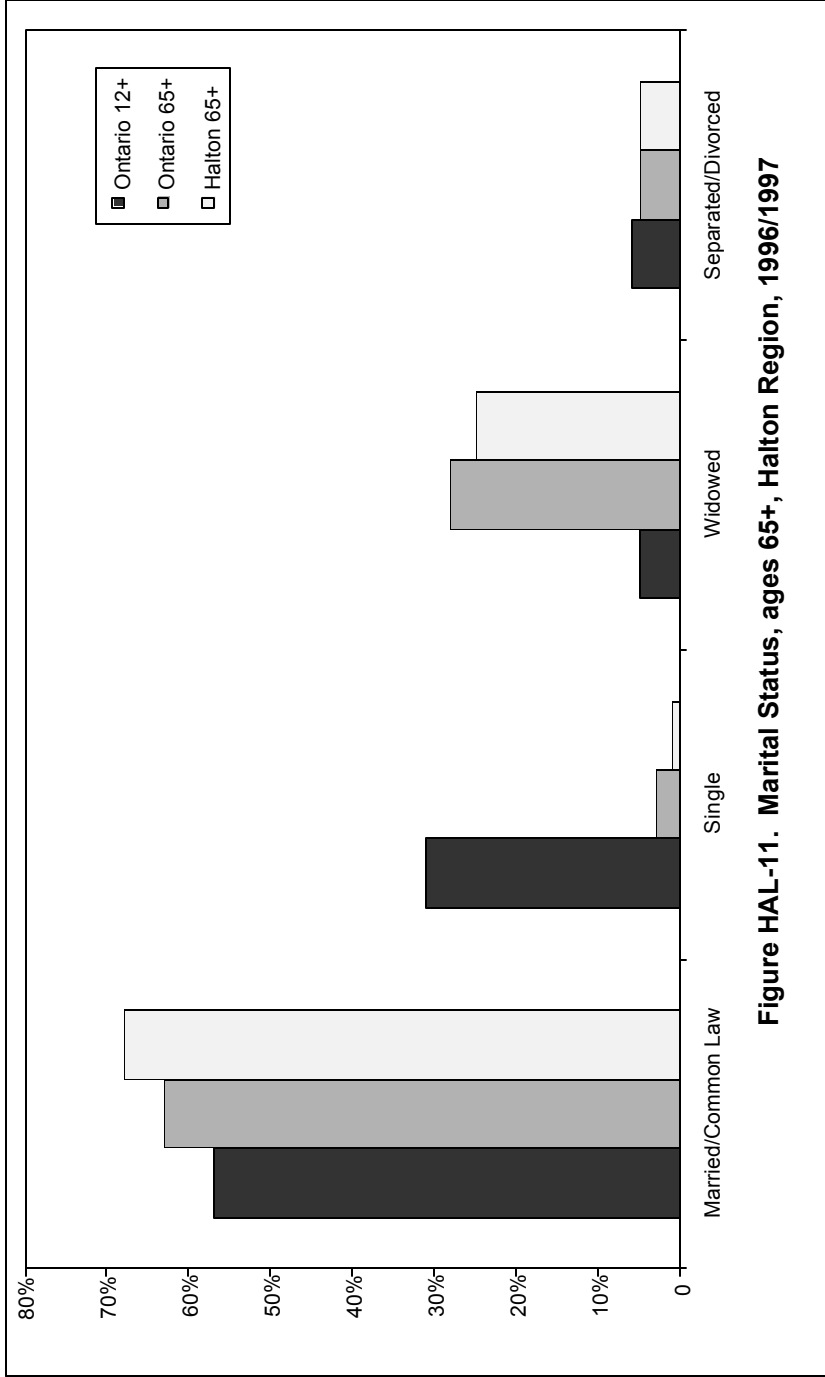
Figure HAL-10. Type of Household, ages 65+, Halton Region, 1996/1997

**Table HAL-4:**  
**Type of Household, Halton Region, 1996/1997**

Household type	Ontario 12+	Ontario 65+	Halton 65+
Unattached Individual	11%*	30%	26%
Couple Alone	22%	54%	57%
Couple and Child >=25	4%*	7%*	6%*
Other	63%	9%*	11%*

Source: The Ontario Health Survey, 1996/1997

\* Results subject to high sampling variability



**Table HAL-5: Marital Status. Halton Region, 1996/1997**

Marital Status	Ontario 12+	Ontario 65+	Halton 65+
Married/Common Law	57%	63%	68%
Single	31%	3%*	---
Widowed	5%*	28%	25%
Separated/Divorced	6%*	5%*	5%*

Source: The Ontario Health Survey, 1996/1997

\* Results subject to high sampling variability

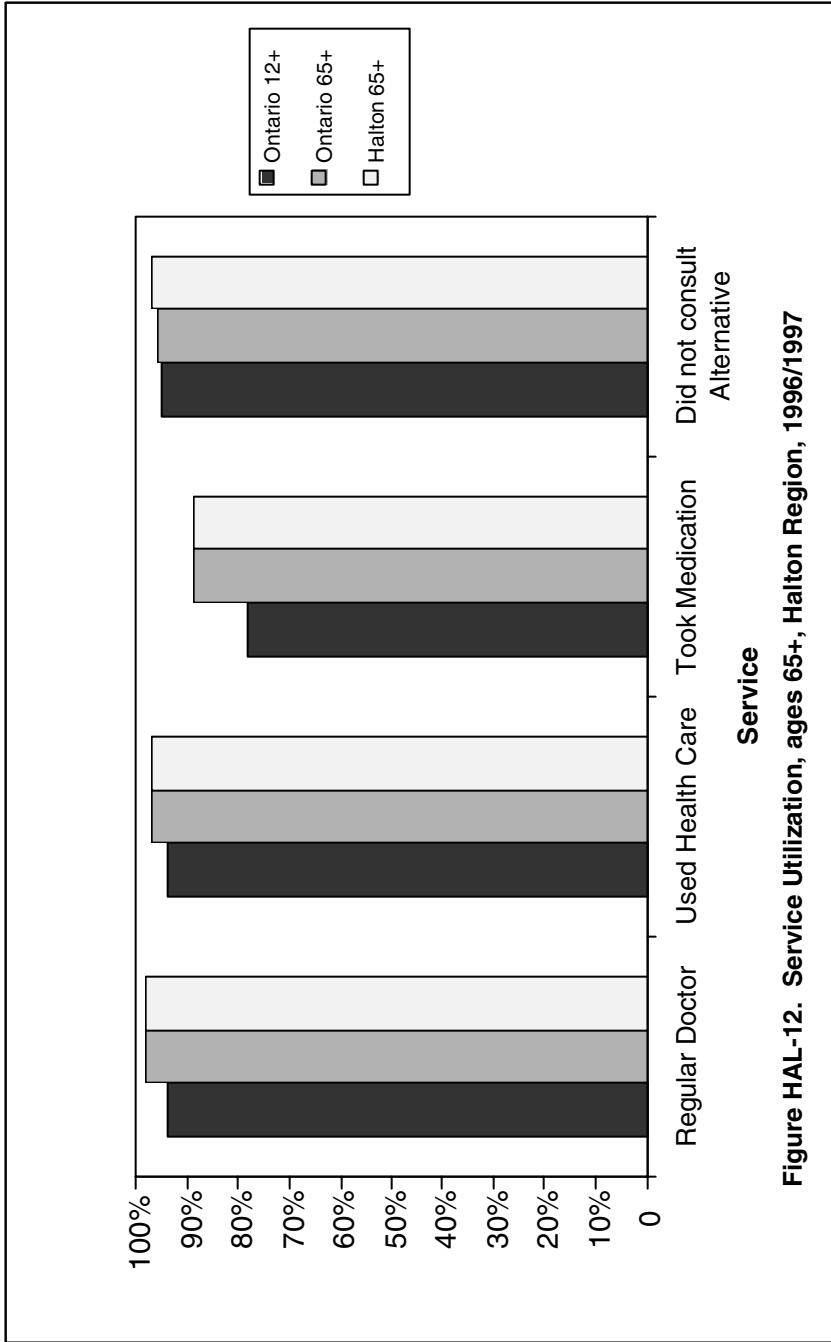


Figure HAL-12. Service Utilization, ages 65+, Halton Region, 1996/1997

Utilization Criteria	Ontario 12+	Ontario 65+	Halton 65+
Has a regular doctor	94%	98%	98%
Used health care in last year	94%	97%	97%
Took medication in last year	78%	89%	89%
Did not consult alternative medicine in last year	95%	96%	97%

Source: The Ontario Health Survey, 1996/1997

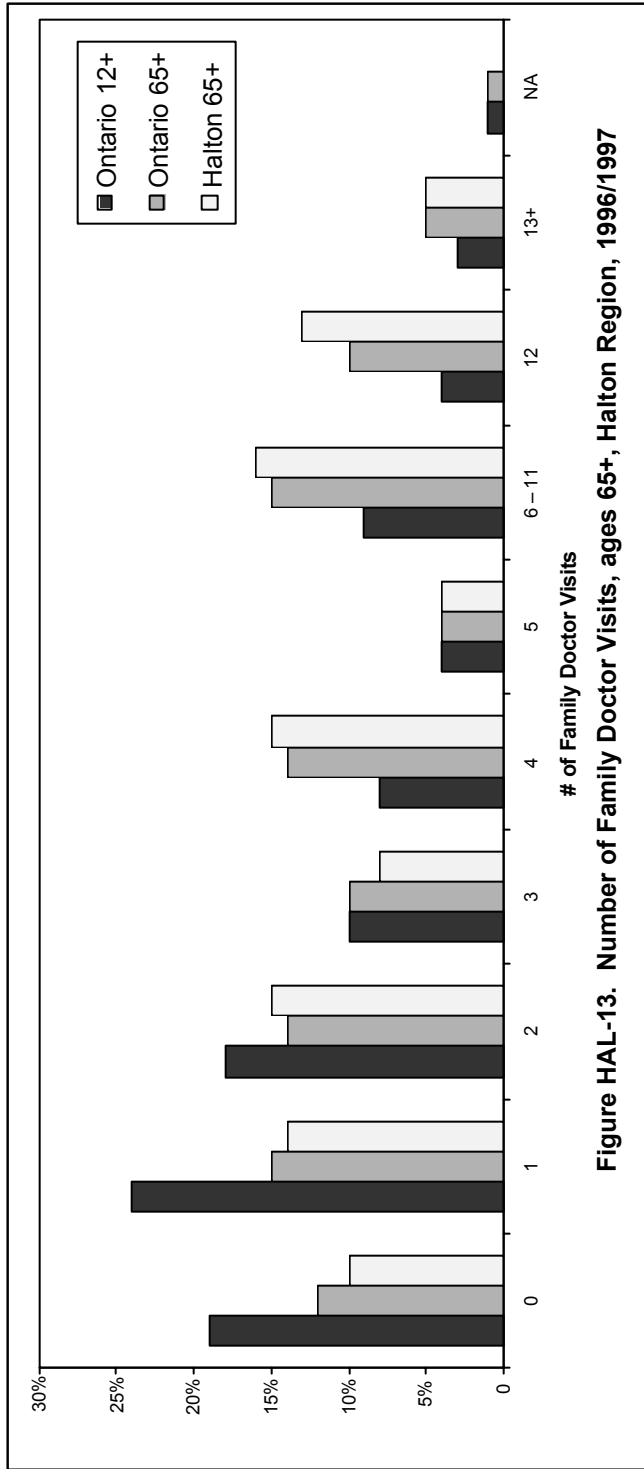


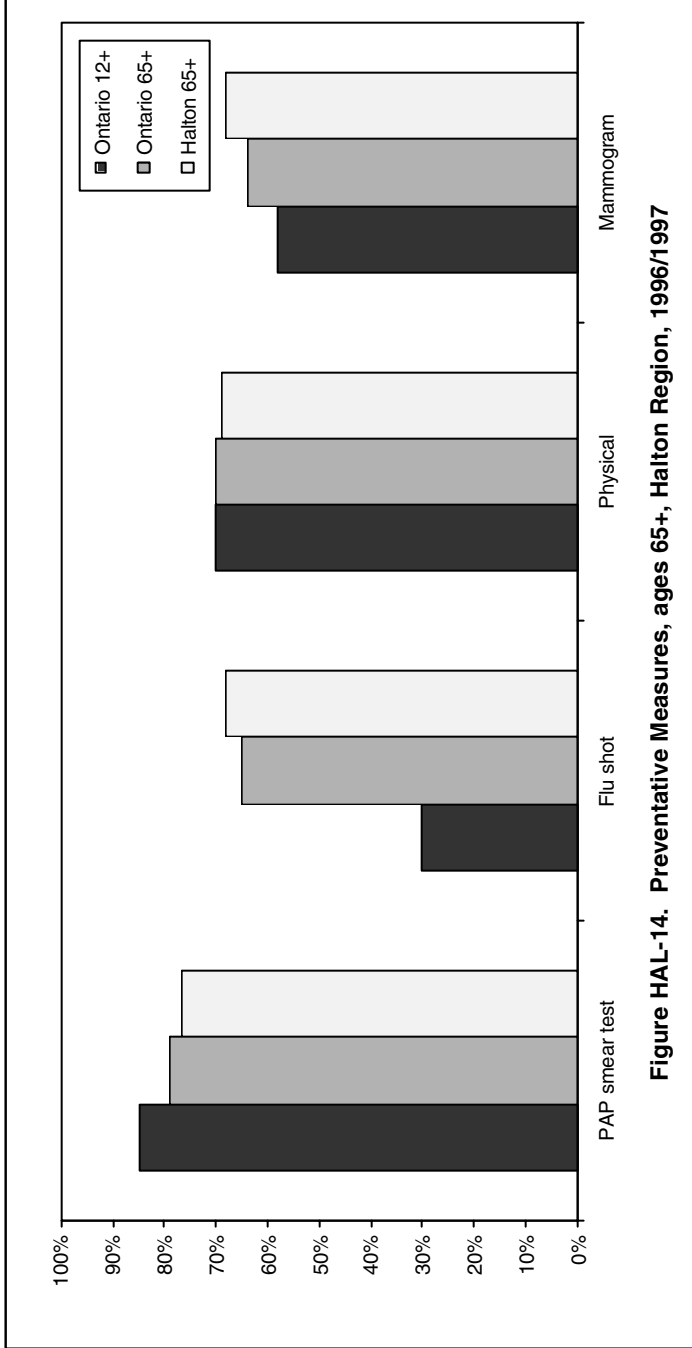
Figure HAL-13. Number of Family Doctor Visits, ages 65+, Halton Region, 1996/1997

**Table HAL-7:**  
**Number of Family Doctor Visits, Halton Region, 1996/1997**

Number of Family Doctor Visits	Ontario 12+	Ontario 65+	Halton 65+
0	19%	12%*	10%*
1	24%	15%	14%*
2	18%	14%*	15%
3	10%*	10%*	8%*
4	8%*	14%*	15%
5	4%*	4%*	4%*
6-11	9%*	15%	16%
12	4%*	10%*	13%
13+	3%*	5%*	5%*
NA	1%*	1%*	0%*

Source: The Ontario Health Survey, 1996/1997

\* Results subject to high sampling variability



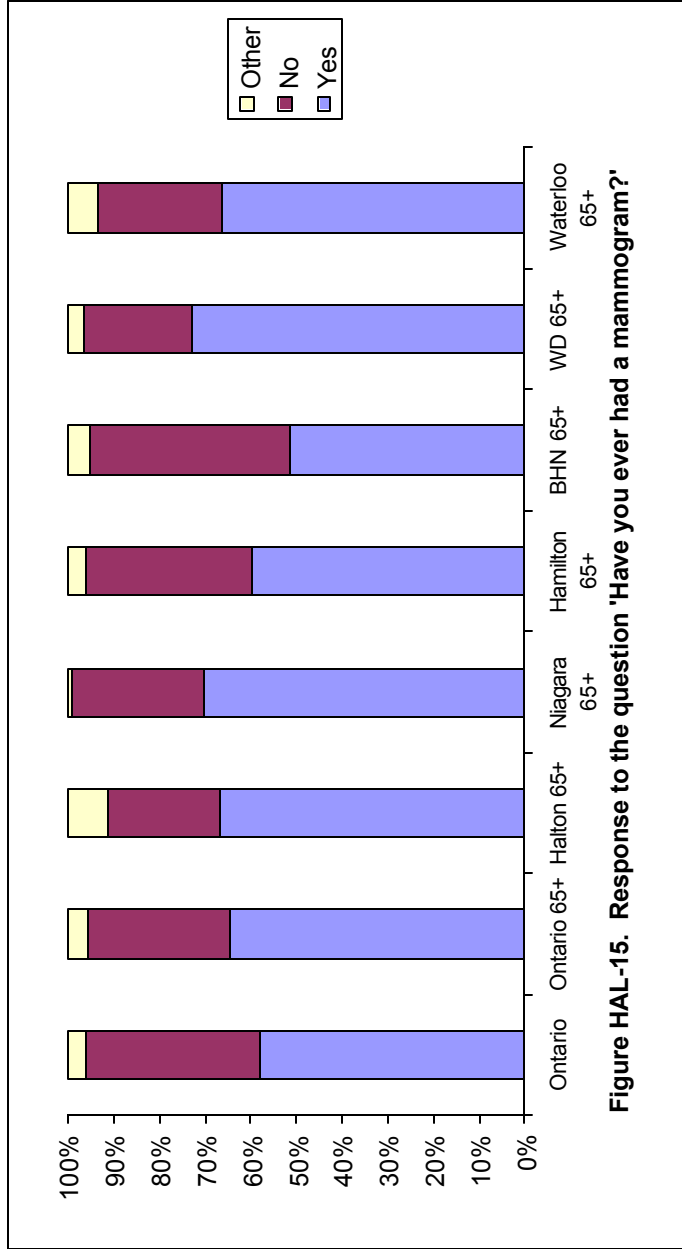
**Table HAL-8: Preventative Measures, Halton Region, 1996/1997**

Preventative Measure	Ontario 12+	Ontario 65+	Halton 65+
Ever had a PAP smear test? (All women over 65)	85%	79%	77%
Ever had a Flu shot?	30%	65%	68%
Had Physical within last year?	70%	70%	69%
Ever had a mammogram? (All women over 65)	58%	64%	68%

Source: The Ontario Health Survey, 1996/1997

**Notes, Definitions & Formulas**

Mammogram data originates from the Ontario Health Survey. Applicable respondents are shown to have answered 'yes,' 'no,' or 'other' ('other' is a combination of numerous responses such as 'I don't know'). Those that have had a mammogram and are of an age between 65 and 72 were further questioned as to 'Last time mammogram was done.'

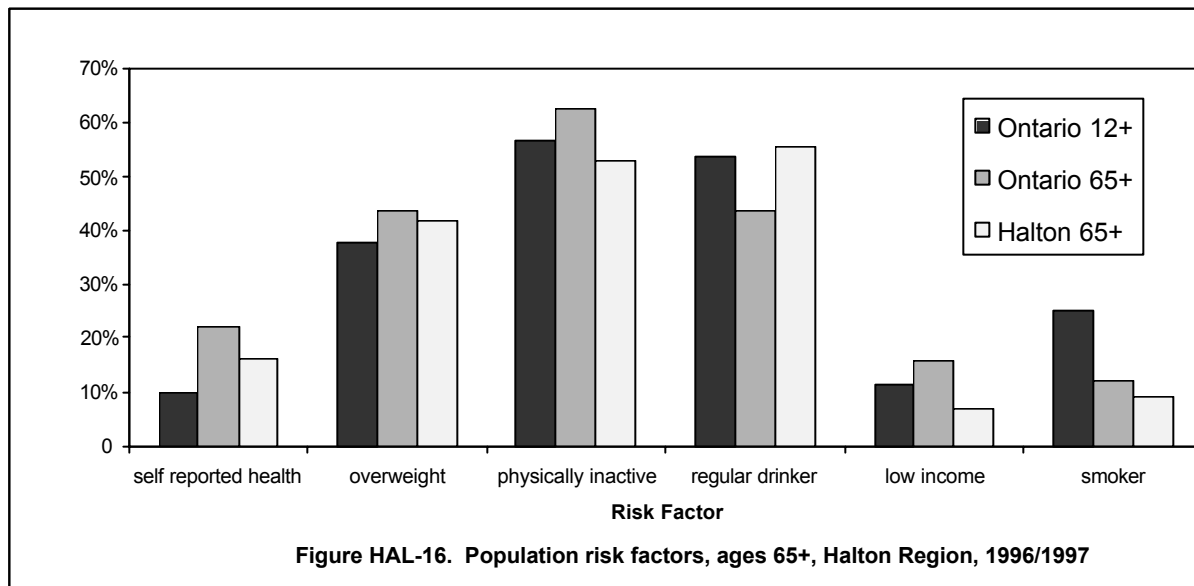


**Figure HAL-15. Response to the question 'Have you ever had a mammogram?'**

**Table HAL-9:**

When was last mammogram? Halton Region, 1996/1997		
When last Mammogram?	Ontario 65+	Halton 65+
Less than 1 year ago	45%	50%
Between 1 and 2 Years	25%	21%
Over 2 years	30%	29%

Source: The Ontario Health Survey, 1996/1997



Risk Factor	Ontario 12+	Ontario 65+	Halton 65+
Self-reported health was 'fair' or 'poor'	10%*	22%	16%
Self-reported to be 'overweight'	37%	44%	42%
Physically inactive	57%	63%	53%
Regular drinker	54%	43%	56%
Low Income	11%*	15%	7%*
Smoker	25%	12%*	9%*

Risk Factor	Definition	Reasoning for Inclusion
Self-Reported Health	How would you rate your general Health?	Research shows self-reported health is related to morbidity and mortality, especially among the elderly <sup>1</sup>
Self-Reported weight	How would you rate your current weight?	BMI scores are not collected for the elderly. Obesity has been linked to numerous health problems <sup>2</sup>
Physically Inactive	Derived from many Questions.	Physically activity leads to a healthier lifestyle <sup>3</sup>
Regular Drinker	Derived from many Questions.	Research has shown alcohol can lead to many health problems <sup>4</sup>
Low Income	Derived from many Questions.	Research has linked low income to mortality <sup>5</sup>
Smoker	Derived from many Questions.	Research has shown smoking can lead to many health problems <sup>6</sup>

Source: The Ontario Health Survey, 1996/1997

\* Results subject to high sampling variability

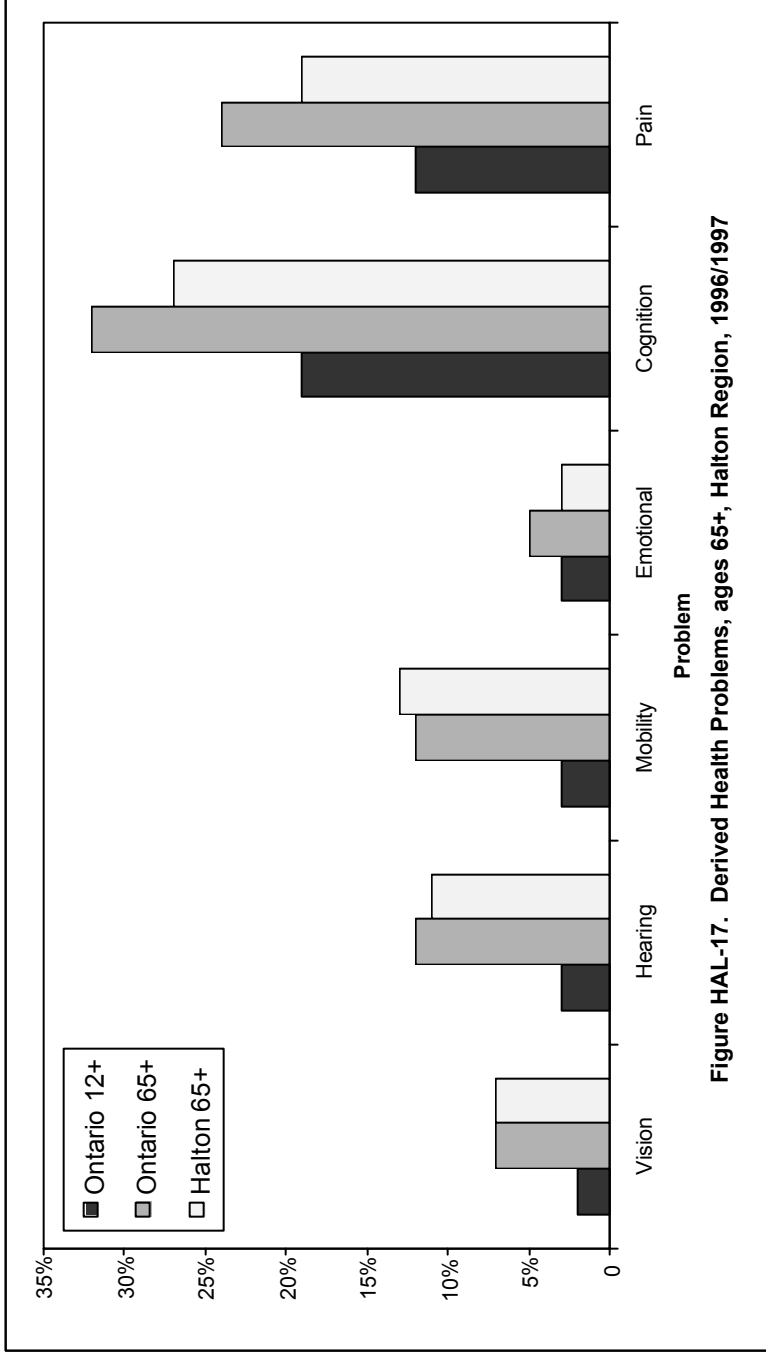


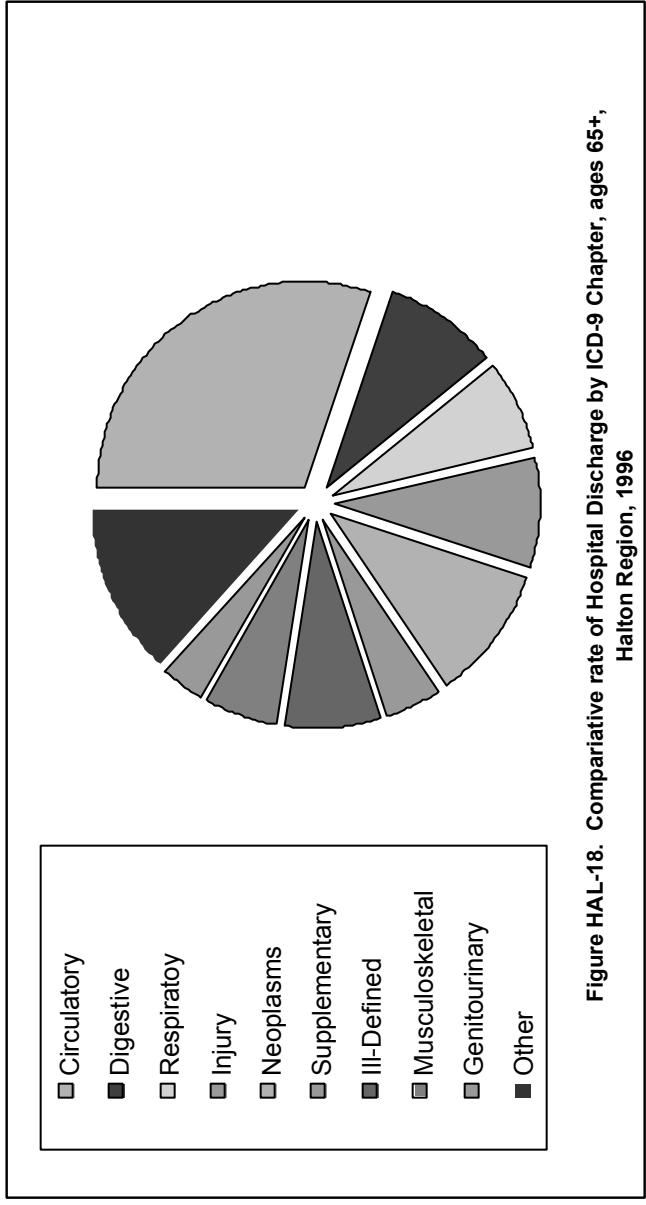
Figure HAL-17. Derived Health Problems, ages 65+, Halton Region, 1996/1997

**Table HAM-12:**  
**Derived Physical/Emotional Problems, Halton Region, 1996/1997**

Type of problem derived from the OHS	Ontario 12+	Ontario 65+	Halton 65+
Has a vision problem beyond corrective lenses	----	7%*	7%*
Hearing	3%*	12%*	11%*
Mobility	3%*	12%*	13%*
Emotion – less than 'Somewhat Happy'	3%*	5%*	----
Cognition	19%	32%	27%
Is in some type of pain	12%*	24%	19%

Source: The Ontario Health Survey, 1996/1997

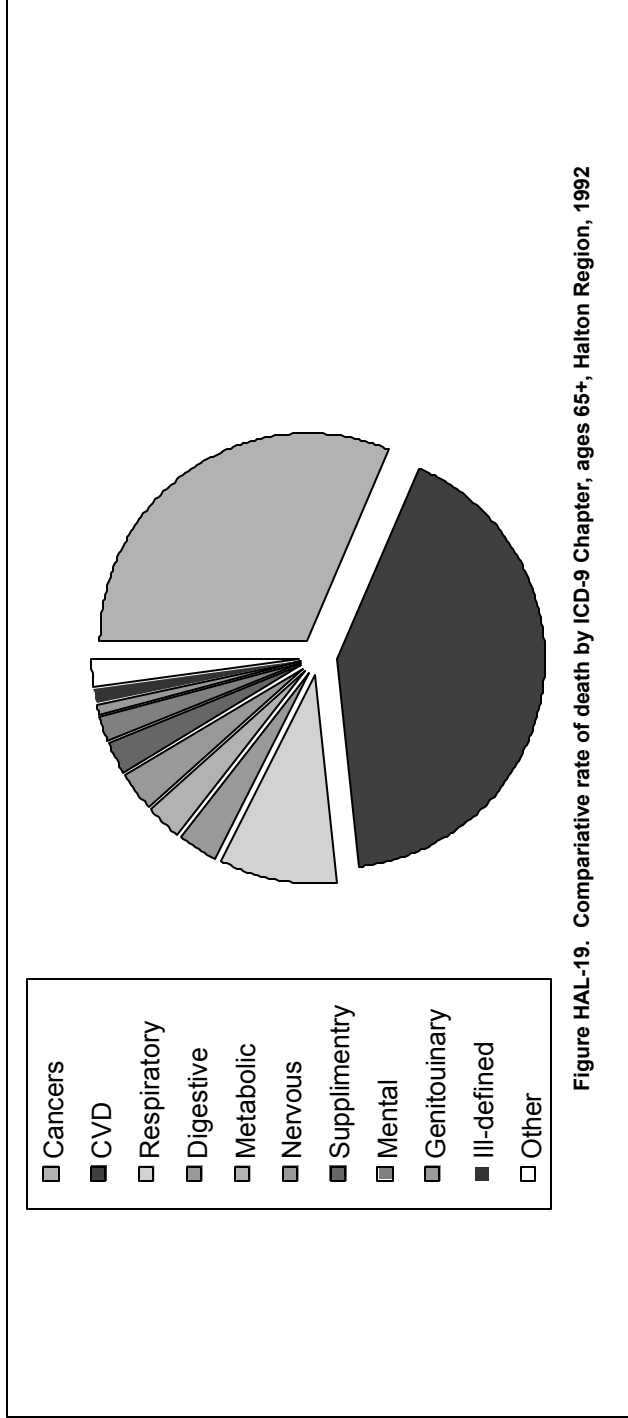
\* Results subject to high sampling variability



**TABLE HAL-13: Comparative rate of Hospital Discharge by ICD-9 Chapter, ages 65+, 1996**

ICD Chapter	Brant	HN	Halton	Hamilton	Niagara	Waterloo	WD
Diseases of the Circulatory System	30.61%	32.32%	30.17%	30.52%	30.83%	28.70%	27.10%
Disease of the Digestive System	9.59%	11.68%	9.12%	7.06%	7.43%	6.42%	7.79%
Disease of the Respiratory System	8.94%	8.78%	7.16%	8.61%	8.96%	9.38%	10.46%
Injuries and Poisoning	8.61%	8.65%	8.53%	8.68%	8.67%	8.28%	9.31%
Neoplasms	8.55%	10.78%	10.71%	11.39%	8.72%	11.12%	9.50%
Supplementary Classifications	6.94%	3.55%	4.45%	4.04%	4.20%	4.73%	4.99%
Symptoms, Signs, and Ill-Defined Conditions	6.18%	4.95%	7.32%	5.60%	5.93%	6.24%	6.37%
Musculoskeletal System and Connecting Tissue	5.30%	4.86%	6.00%	6.41%	5.96%	6.28%	5.88%
Diseases of the Genitourinary System	4.64%	5.21%	3.29%	3.67%	3.87%	3.63%	4.27%
Other	10.64%	9.21%	13.25%	14.03%	15.44%	15.22%	14.32%

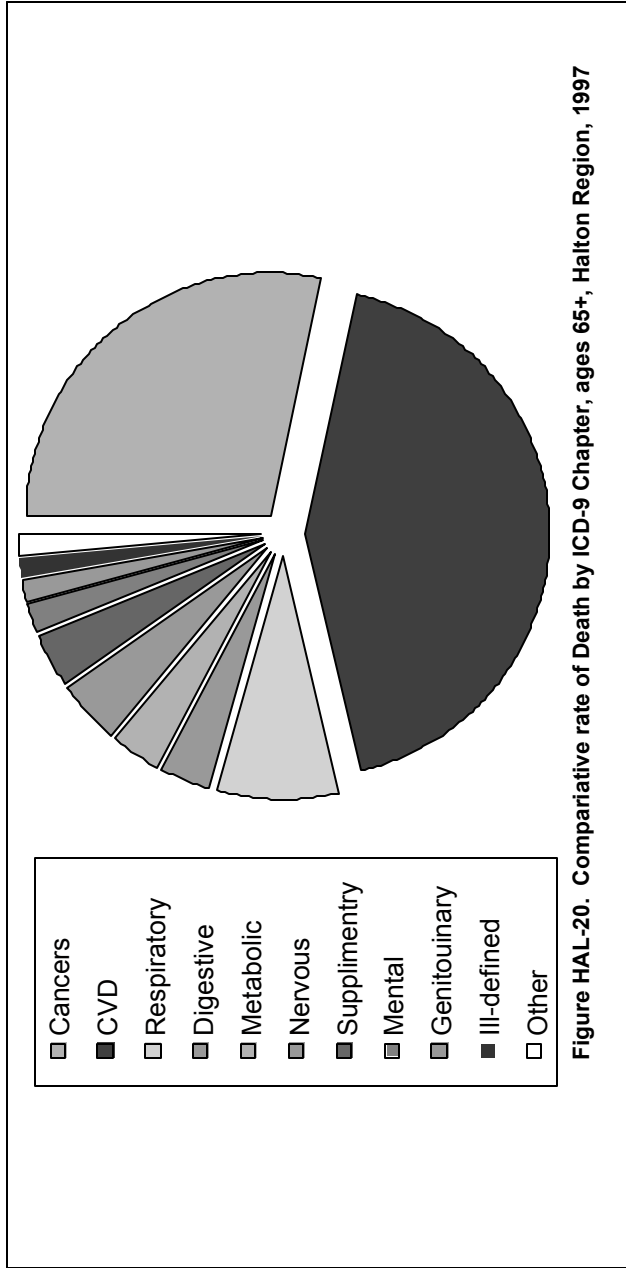
Source: Provincial Health Planning Database, 2002



**Table HAL-14: Comparative rate of death by ICD-9 Chapter: Halton Region, 1992**

ICD CHAPTER	Ontario	Ontario 65+	Halton 65+
Neoplasms	27.90%	25.40%	31.50%
Diseases of the Circulatory System	39.70%	45.50%	41.90%
Diseases of the Respiratory System	8.10%	9.70%	9.20%
Diseases of the Digestive System	3.60%	3.40%	2.90%
Endocrine, Nutritional and Metabolic Disease and Immunity Disorders	3.10%	3.20%	2.80%
Disease of the Nervous System	2.80%	3.00%	3.20%
Supplementary Classification	5.70%	2.50%	2.30%
Mental Disorders	1.90%	2.10%	1.90%
Diseases of the Genitourinary System	1.50%	1.70%	1.10%
Symptoms, Signs, and ill-defined conditions	2.30%	2.50%	0.90%
Other	3.40%	1.00%	2.30%

Source: Health Planning System Initiative, 2000



**Table HAL-15: Comparative rate of death by ICD-9 Chapter, Halton Region, 1997**

ICD CHAPTER	Ontario	Ontario 65+	Halton 65+
Neoplasms	27.98%	25.47%	28.30%
Diseases of the Circulatory System	38.04%	42.79%	43.06%
Diseases of the Respiratory System	8.68%	10.18%	8.14%
Diseases of the Digestive System	3.55%	3.46%	3.17%
Endocrine, Nutritional and Metabolic Disease and Immunity Disorders	3.54%	3.75%	3.31%
Disease of the Nervous System	3.03%	3.27%	4.35%
Supplementary Classification	5.60%	2.84%	3.52%
Mental Disorders	2.47%	2.82%	1.86%
Diseases of the Genitourinary System	1.62%	1.89%	1.38%
Symptoms, Signs, and ill-defined conditions	1.93%	2.84%	1.38%
Other	3.57%	0.69%	1.52%

Source: Health Planning System Initiative, 2000

<b>Age</b>	<b>Brant</b>	<b>Hald-Nor</b>	<b>Halton</b>	<b>Hamilton</b>	<b>Niagara</b>	<b>Waterloo</b>	<b>Well-Duff</b>
<b>0-4</b>	1.20	0.87	0.52	0.73	0.83	1.00	0.70
<b>5-9</b>	0	0.41	0.43	0.74	0.24	0.11	0.20
<b>10-14</b>	1.77	0.48	0.17	0.39	0.72	0.95	0.25
<b>15-19</b>	1.63	2.94	0.68	0.79	1.00	1.30	1.52
<b>20-24</b>	1.82	0.84	0.75	0.85	0.83	0.58	0.71
<b>25-29</b>	1.18	0.78	1.13	1.36	1.00	1.13	1.21
<b>30-34</b>	1.13	1.80	0.68	1.01	1.27	1.06	0.96
<b>35-39</b>	1.06	1.32	1.02	1.24	1.32	1.03	1.28
<b>40-44</b>	1.38	1.01	0.92	0.99	1.07	0.98	0.86
<b>45-49</b>	1.00	1.11	0.89	0.98	1.40	0.92	1.06
<b>50-54</b>	1.35	1.11	0.86	1.19	1.28	1.00	1.06
<b>55-59</b>	1.20	1.34	0.95	1.26	1.10	1.19	1.13
<b>60-64</b>	1.41	1.07	1.02	1.12	1.25	1.01	1.16
<b>65-69</b>	1.16	0.93	0.89	1.22	1.12	0.96	1.17
<b>70-74</b>	1.32	1.04	0.91	1.11	1.11	0.97	0.96
<b>75-79</b>	0.95	1.23	0.94	1.15	1.04	1.04	1.06
<b>80-84</b>	1.00	1.14	0.87	1.00	0.96	0.98	1.12
<b>85+</b>	1.15	0.96	0.94	0.94	1.02	0.92	1.12

**Notes, Definitions & Formulas**

Mortality Ratios present the ratio of expected deaths to actual deaths using Ontario as the standard. Any value greater than one represents a greater than expected death rate. For example if the death rate for those aged 85+ in Ontario is 1000/100,000 and in Waterloo it is 950/100,000 the mortality ratio would be 0.95.

Source: Health Planning System Initiative, 2000

Table HAL -17: Age Specific Indirect Standardized Mortality Ratio, a 1997 County to Ontario Comparison							
Age	Brant	Hald-Nor	Halton	Hamilton	Niagara	Waterloo	Well-Duff
0-4	1.61	0.81	0.64	1.47	1.23	1.30	1.44
5-9	0	0	0.13	0.67	0.35	0.21	0.20
10-14	0.81	0	0.44	0.34	0.66	0.36	1.10
15-19	0.46	0.50	1.04	0.52	0.73	1.01	1.27
20-24	0.87	1.74	0.61	0.88	0.90	0.50	0.97
25-29	0.88	1.07	0.55	1.07	0.65	0.52	0.64
30-34	1.90	1.33	0.59	0.88	1.26	0.65	0.71
35-39	1.39	0.91	0.67	1.08	1.13	0.82	0.90
40-44	1.04	0.78	0.80	1.04	1.03	0.97	0.78
45-49	1.35	0.89	0.55	1.22	0.99	1.14	0.98
50-54	1.42	0.87	0.76	1.17	1.06	0.87	0.88
55-59	0.98	1.13	0.68	1.08	0.99	0.78	0.91
60-64	1.21	1.17	0.82	1.18	1.23	0.84	0.84
65-69	1.17	1.22	0.73	1.11	1.00	0.99	1.17
70-74	0.84	1.03	0.87	0.98	1.06	1.01	0.96
75-79	1.02	0.89	0.93	0.94	0.96	1.01	1.06
80-84	0.99	1.06	0.96	0.99	0.98	0.95	1.12
85+	1.16	1.17	0.81	0.94	0.97	0.92	1.12

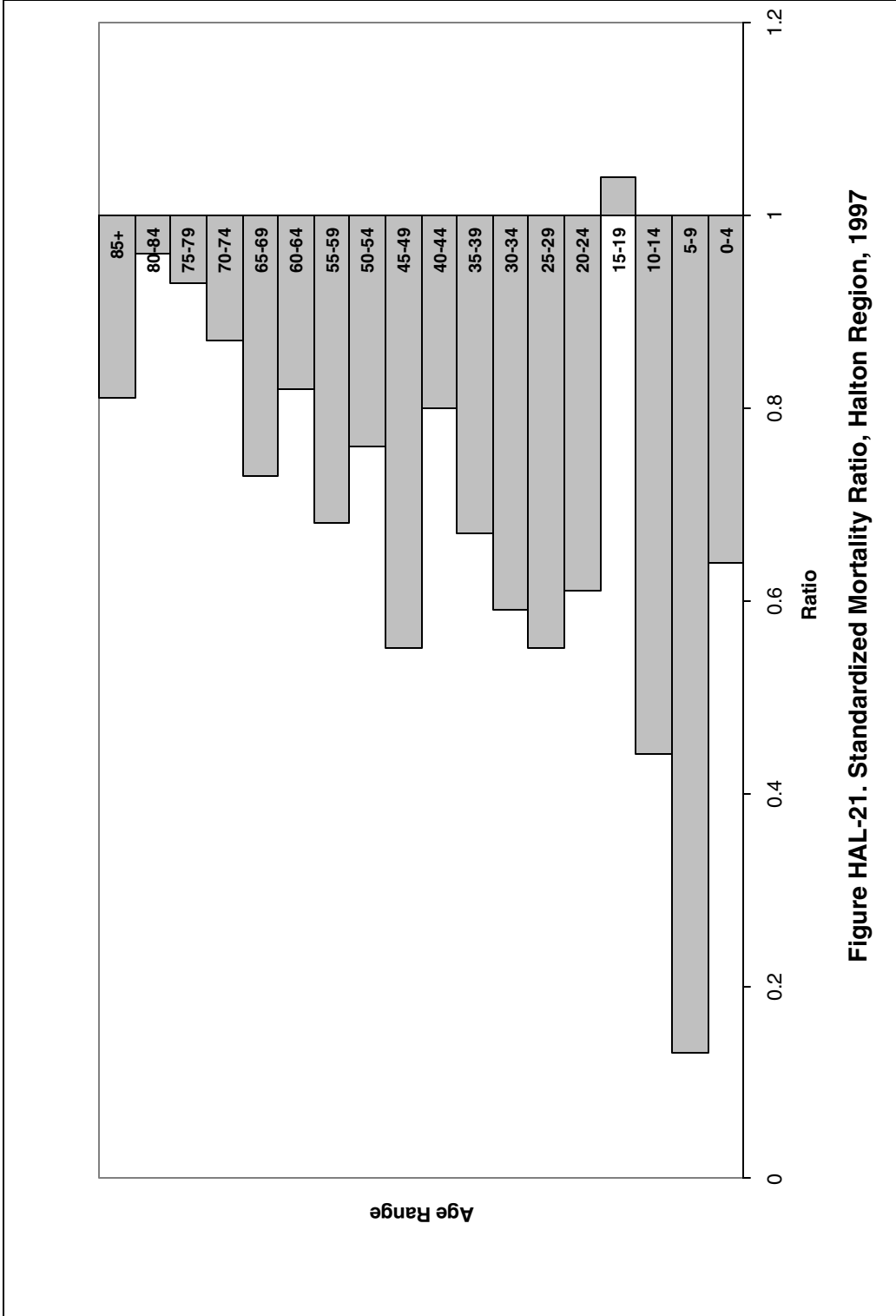
**Notes, Definitions & Formulas**

Mortality Ratios present the ratio of expected deaths to actual deaths using Ontario as the standard. Any value greater than one represents a greater than expected death rate. For example if the death rate for those aged 85+ in Ontario is 1000/100,000 and in Waterloo it is 950/100,000 the mortality ratio would be 0.95.

Source: Health Planning System Initiative, 2000

**Notes, Definitions & Formulas**

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**Figure HAL-21. Standardized Mortality Ratio, Halton Region, 1997**