

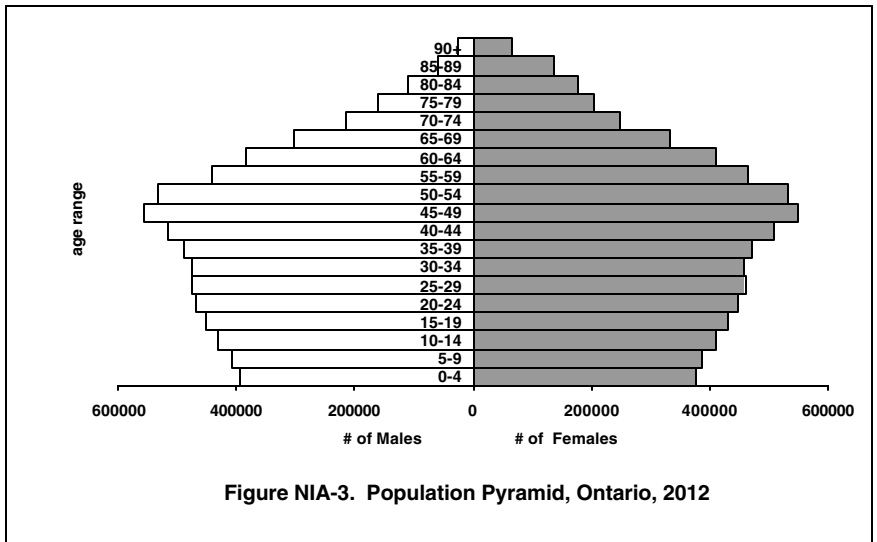
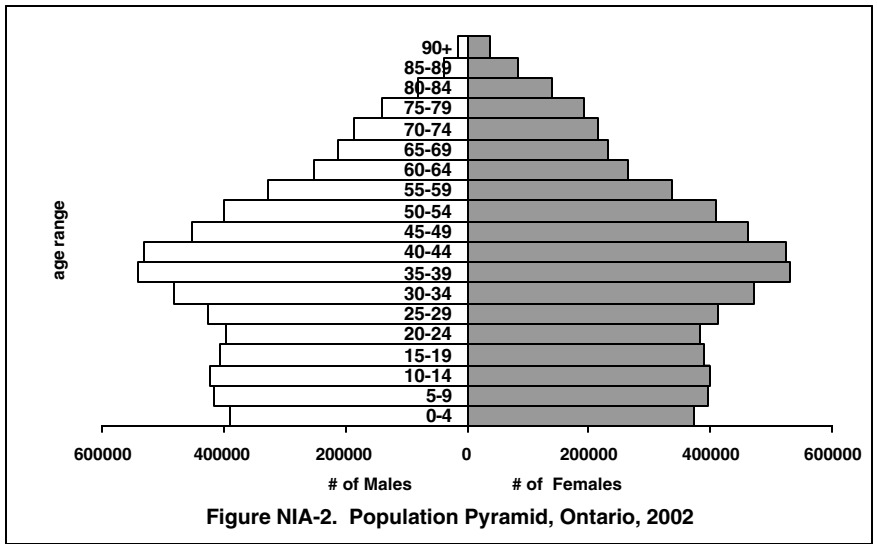
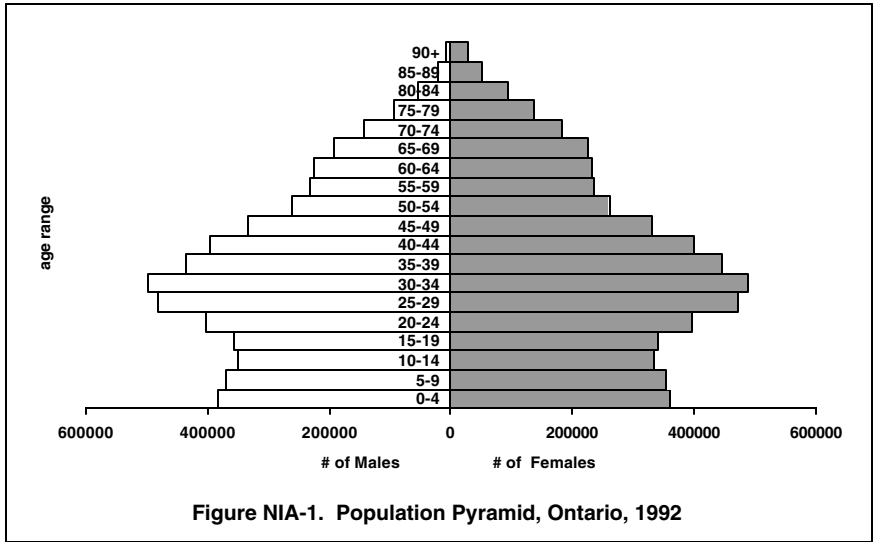
Niagara Region

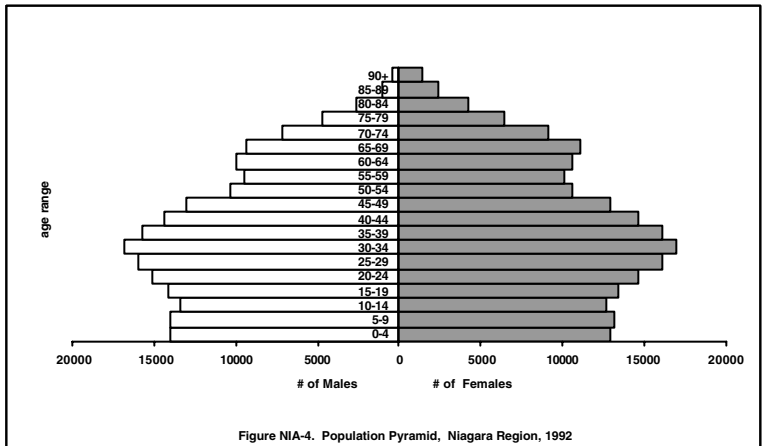
Notes, Definitions & Formulas

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

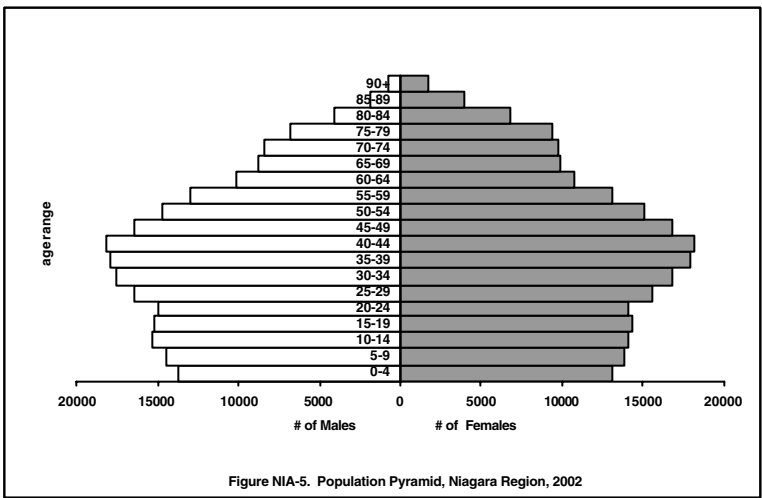
The age of an individual is taken to be the age as of their last birthday (as of census reference date, May 14th, 1996), and is derived from the date of birth.

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

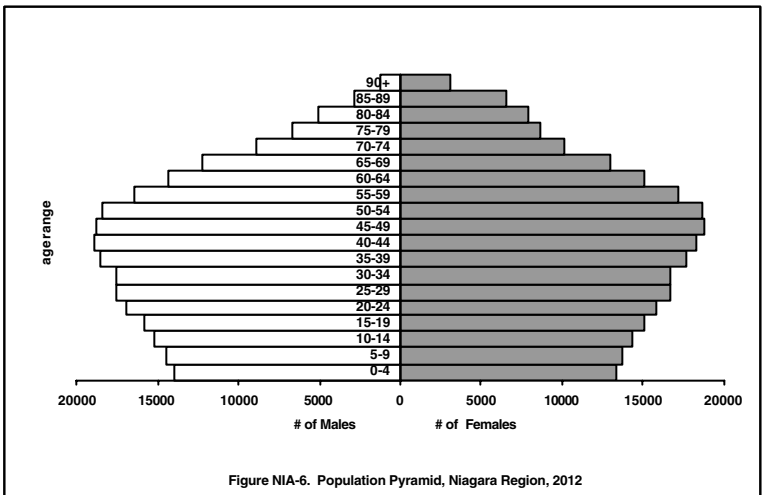




% of total population		
Age	Male	Female
0-4	3.40	3.15
5-9	3.40	3.20
10-14	3.26	3.06
15-19	3.45	3.27
20-24	3.68	3.54
25-29	3.89	3.92
30-34	4.10	4.12
35-39	3.82	3.92
40-44	3.49	3.56
45-49	3.18	3.14
50-54	2.52	2.57
55-59	2.31	2.44
60-64	2.41	2.57
65-69	2.29	2.69
70-74	1.74	2.21
75-79	1.15	1.58
80-84	0.63	1.04
85-89	0.27	0.59
90+	0.11	0.33



% of total population		
Age	Male	Female
0-4	2.96	2.83
5-9	1.13	2.98
10-14	3.29	3.05
15-19	3.28	3.08
20-24	3.23	3.05
25-29	3.53	3.37
30-34	3.78	3.64
35-39	3.86	3.87
40-44	3.91	3.93
45-49	3.54	3.64
50-54	3.16	3.24
55-59	2.81	2.83
60-64	2.18	2.31
65-69	1.89	2.12
70-74	1.81	2.10
75-79	1.48	2.02
80-84	0.89	1.48
85-89	0.39	0.84
90+	0.15	0.38



% of total population		
Age	Male	Female
0-4	2.72	2.59
5-9	2.80	2.67
10-14	2.94	2.80
15-19	3.07	2.92
20-24	3.29	3.07
25-29	3.42	2.23
30-34	3.41	3.23
35-39	3.59	3.43
40-44	3.69	3.55
45-49	3.65	3.66
50-54	3.59	3.64
55-59	3.19	3.33
60-64	2.78	2.95
65-69	2.37	2.53
70-74	1.73	1.97
75-79	1.31	1.69
80-84	0.97	1.54
85-89	0.54	1.27
90+	0.24	0.61

**Table NIA-1:
Population Projections by Age Group, Niagara Region, 1992-2012**

Age Group	1992 Census	2002 (projection)	2012 (projection)	% change 92 - 12
Niagara				
0-4	26991	26873	27359	1.4%
5-9	27218	28321	28168	3.5%
10-14	26059	29412	29539	13.4%
15-19	27673	29546	30871	11.6%
20-24	29792	29143	32766	17.9%
25-29	32187	32013	34260	6.4%
30-34	33901	34423	34239	1.0%
35-39	31897	35893	36171	13.4%
40-44	29053	36358	37280	28.3%
45-49	26015	33316	37636	44.7%
50-54	21000	29704	37210	77.2%
55-59	19564	26163	33569	71.6%
60-64	20539	20834	29496	43.6%
65-69	20497	18640	25226	23.1%
70-74	16266	18141	19034	17.0%
75-79	11245	16026	15437	37.3%
80-84	6093	10965	12921	112.1%
85-89	3542	5746	9327	163.3%
90+	1816	2457	4383	141.4%
Total	412167	464162	514900	24.9%
Ontario				
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%
Total	10615475	12366850	13819024	30.2%

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
 $((P_{age\ 0-24}) / (P_{age\ 25-64}))$

Aged dependency ratio
 $((P_{age\ 65+}) / (P_{age\ 25-64}))$

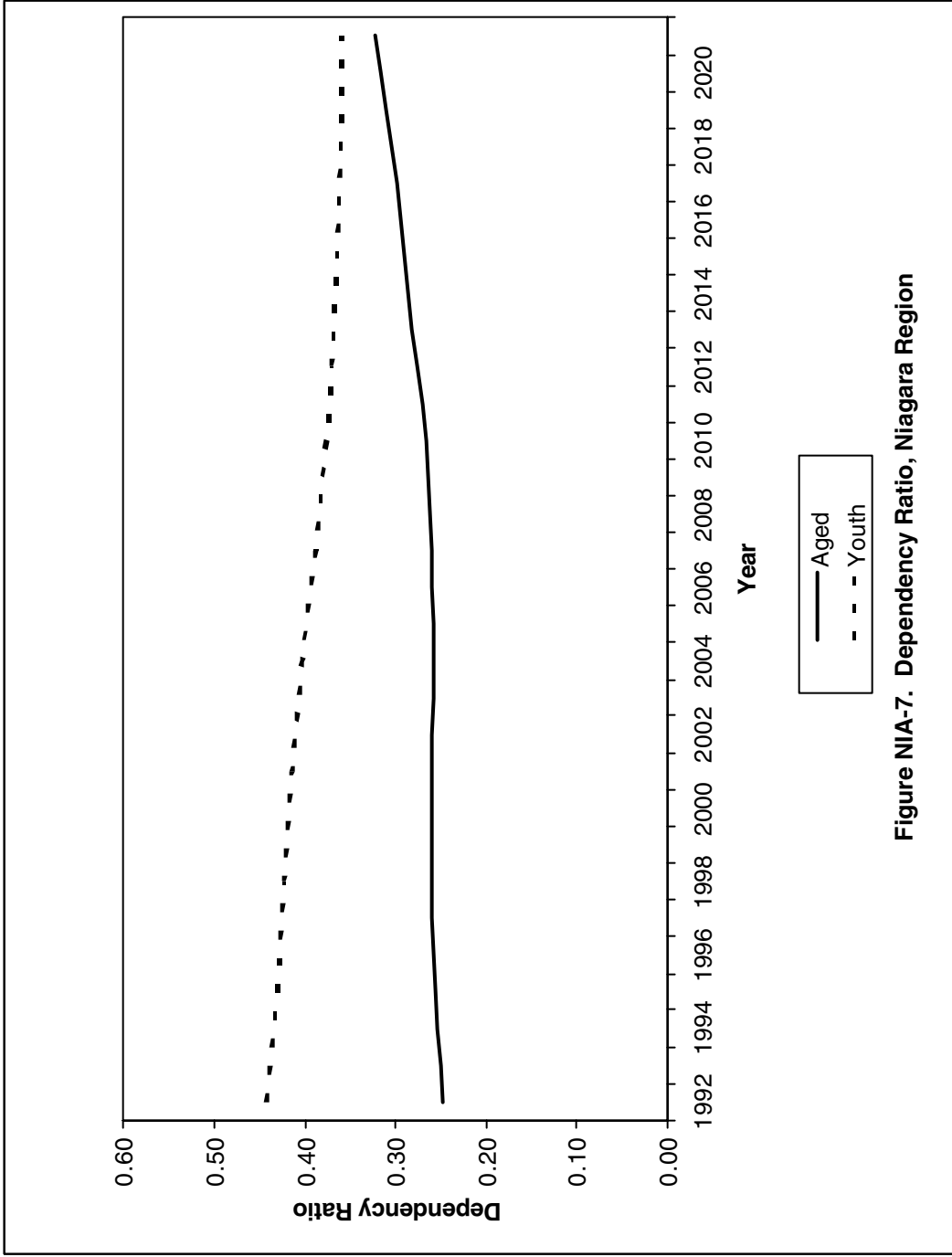
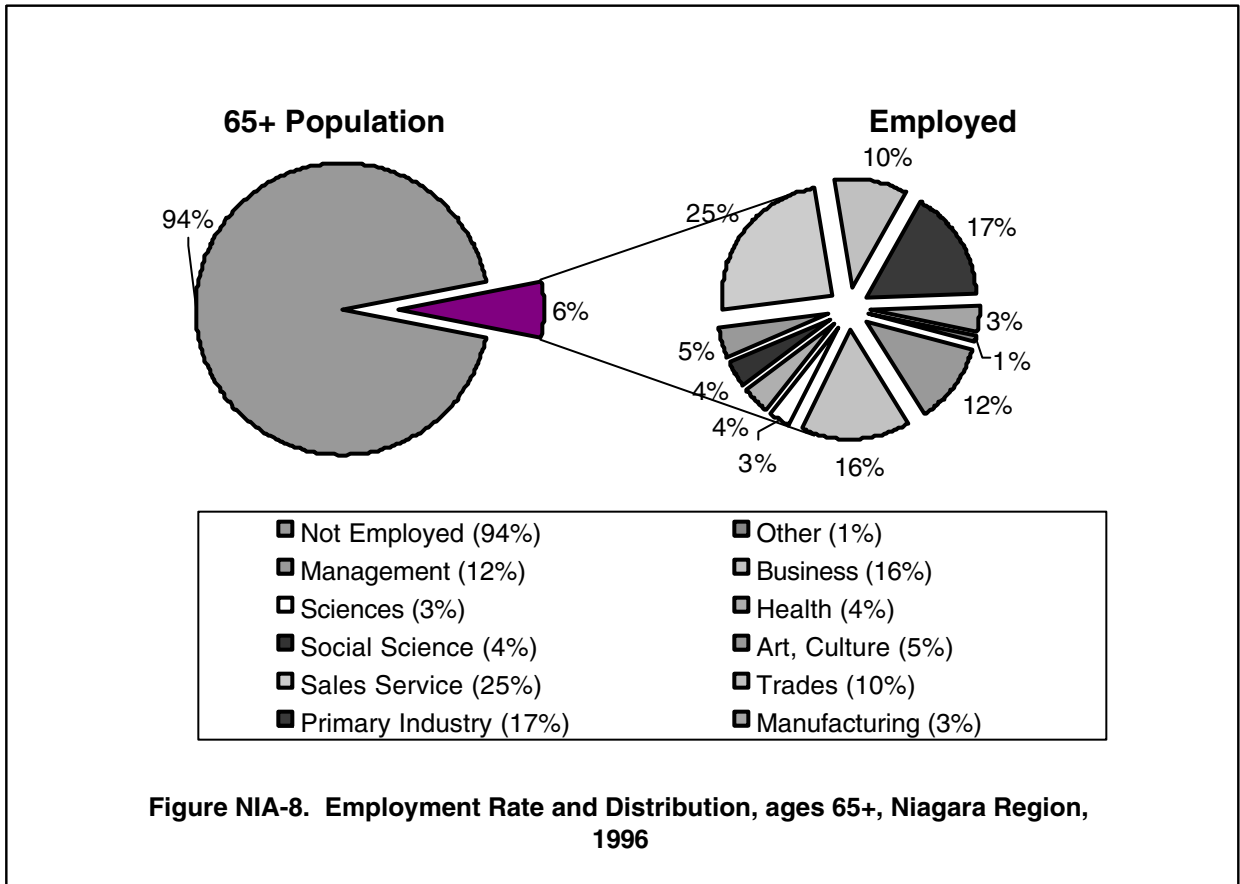


Figure NIA-7. Dependency Ratio, Niagara Region



**Table NIA-2:
Job Classification Distribution, Niagara Region, 1996**

	Ontario	Ontario 65+	Niagara 65+
Management	7.14%	0.18%	0.76%
Business	13.30%	0.30%	1.03%
Sciences	2.79%	0.07%	0.21%
Health	4.32%	0.07%	0.27%
Social Science	4.71%	0.10%	0.25%
Art, culture	1.47%	0.07%	0.29%
Sales Service	20.51%	0.42%	1.57%
Trades	17.65%	0.14%	0.66%
Primary Industry	14.43%	0.13%	1.06%
Manufacturing	11.61%	0.09%	0.22%
Other	2.81%	0.04%	0.07%

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

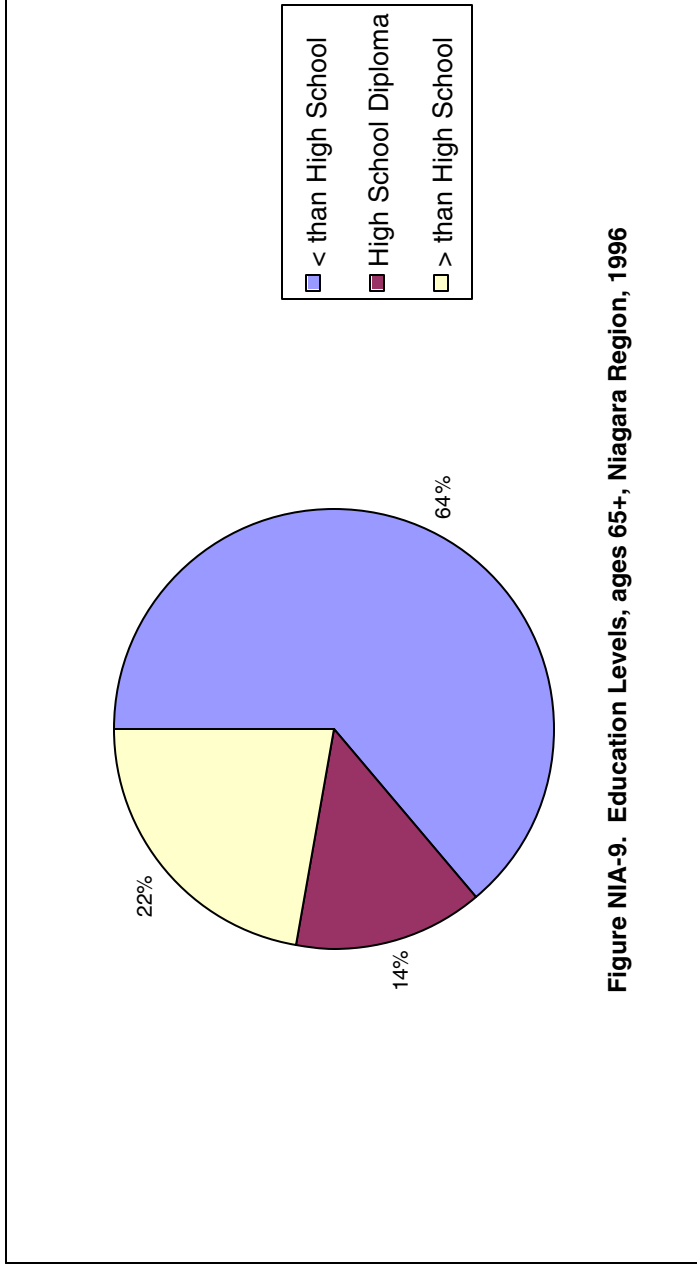


Figure NIA-9. Education Levels, ages 65+, Niagara Region, 1996

**Table NIA-3:
Highest Level of Education, Niagara Region, 1996**

Highest Education Achieved	Ontario	Ontario 65+	Niagara 65+
No degree, certificate or diploma	35.04%	60.58%	63.96%
Secondary (high) school graduation certificate	23.80%	14.69%	13.69%
Trades certificate or diploma	9.36%	8.52%	9.18%
Other non-university certificate or diploma	14.95%	7.59%	6.86%
University certificate or diploma below bachelor level	1.92%	1.96%	1.64%
Bachelor's degree	9.55%	3.71%	2.78%
University certificate or diploma above bachelor level	1.75%	0.88%	0.60%
Medical degree	0.50%	0.47%	0.37%
Master's degree	2.63%	1.18%	0.74%
Earned doctorate	0.51%	0.43%	0.18%

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

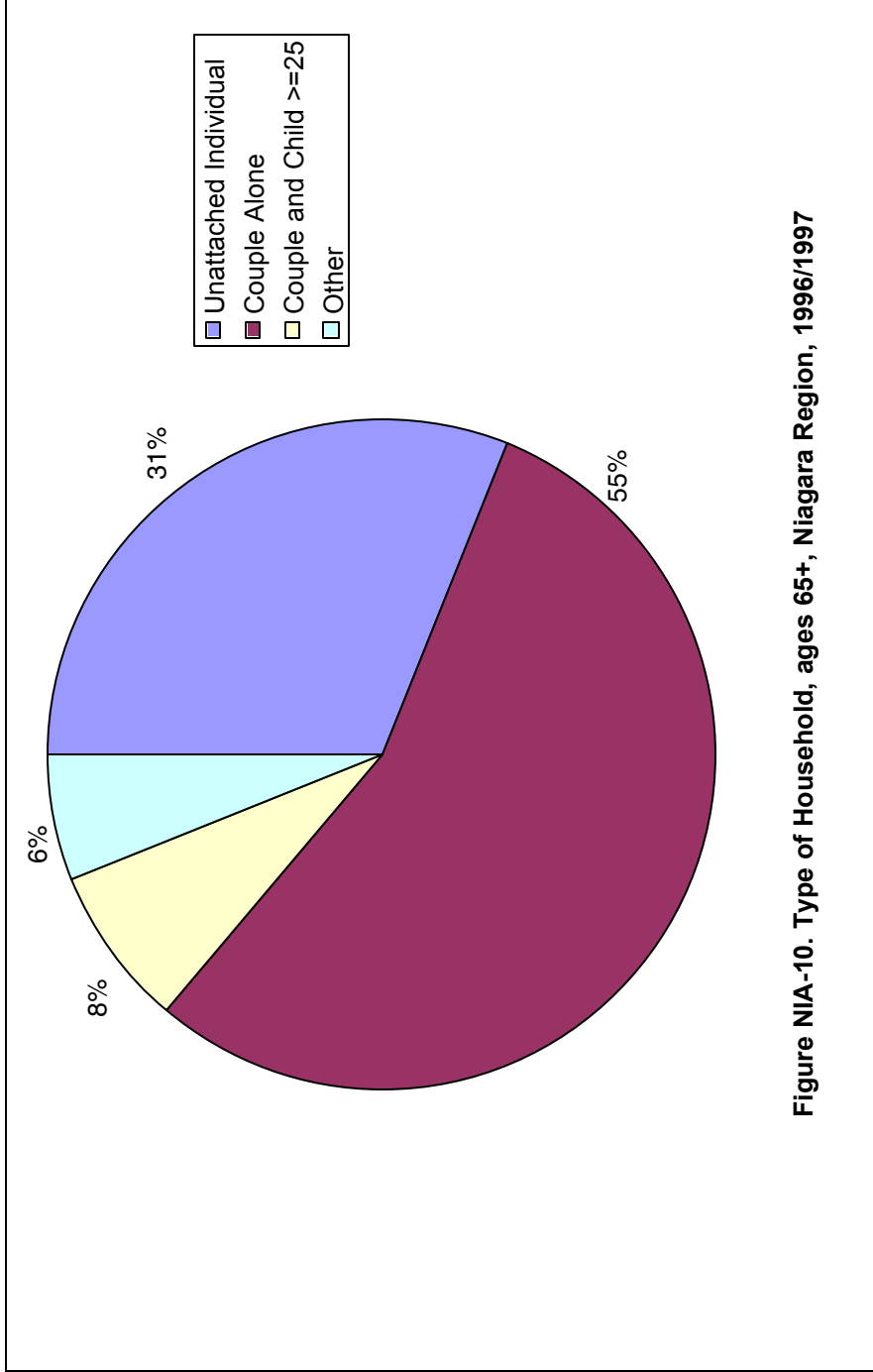


Figure NIA-10. Type of Household, ages 65+, Niagara Region, 1996/1997

Household type	Ontario 12+	Ontario 65+	Niagara 12+
Unattached Individual	11%*	30%	31%
Couple Alone	22%	54%	55%
Couple and Child >=25	4%*	7%*	8%*
Other	63%	9%*	6%*

Source: The Ontario Health Survey, 1996/1997

* Results subject to high sampling variability

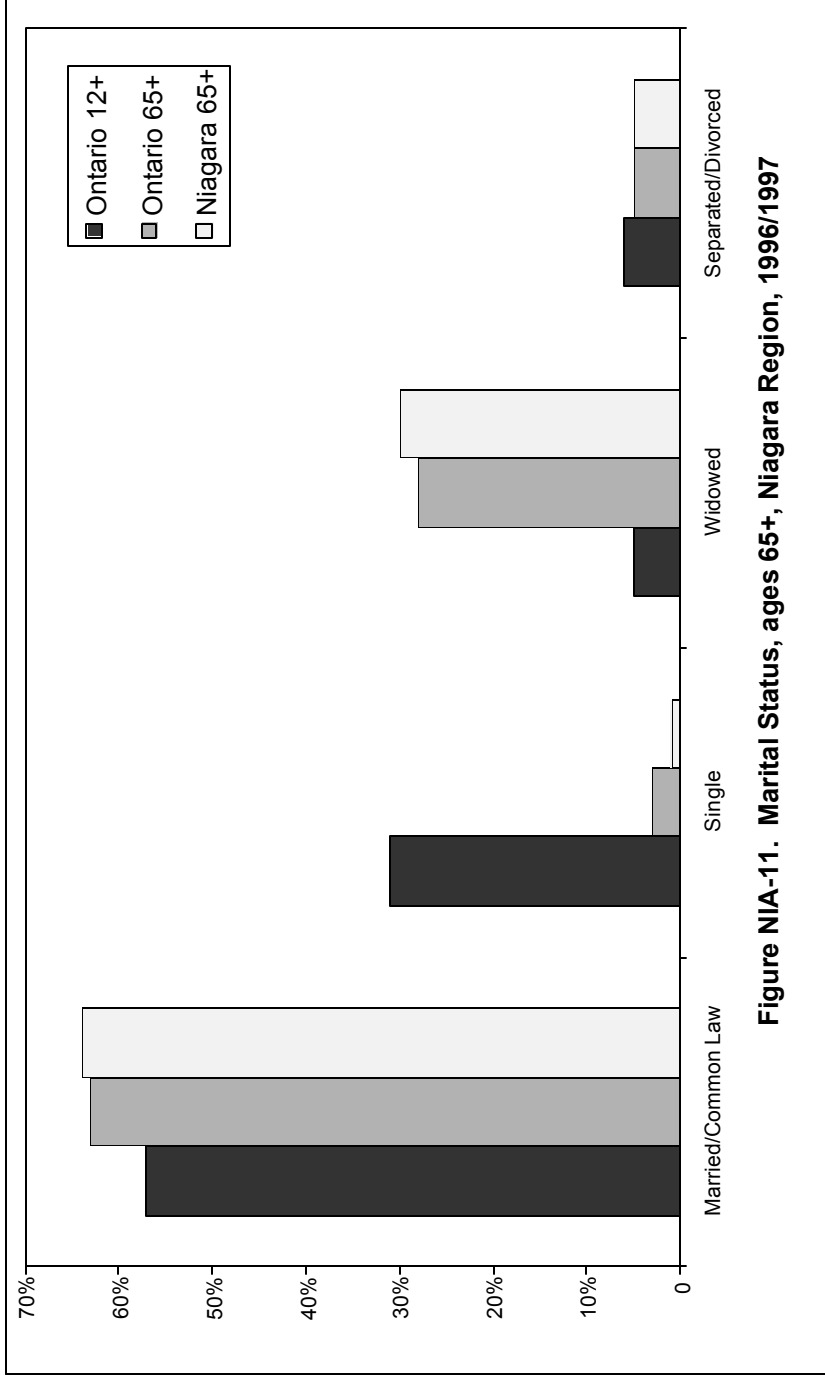
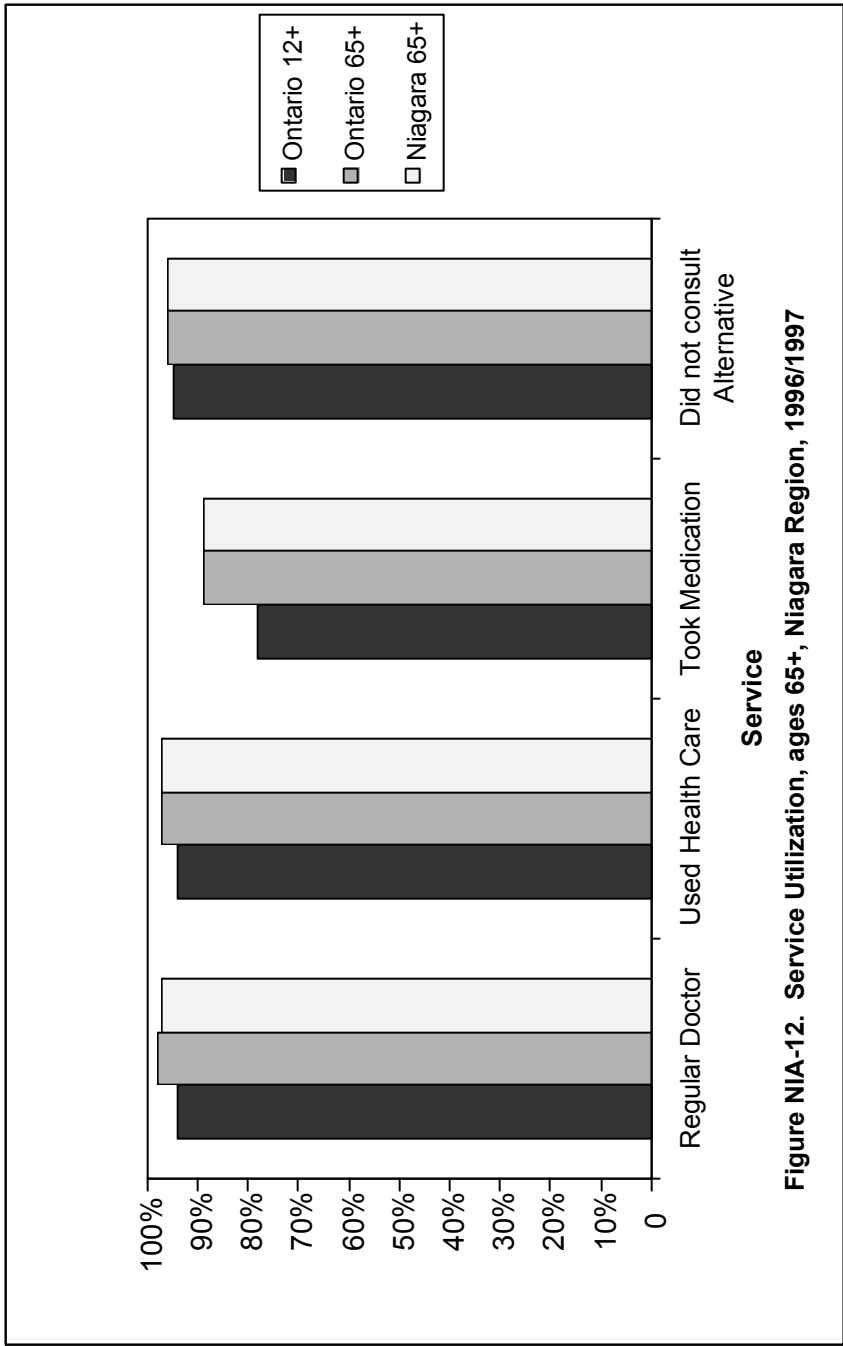


Table NIA-5: Marital Status, Niagara Region, 1996/1997

Marital Status	Ontario 12+	Ontario 65+	Niagara 65+
Married/Common Law	57%	63%	64%
Single	31%	3%*	---
Widowed	5%*	28%	30%
Separated/Divorced	6%*	5%*	5%*

Source: The Ontario Health Survey, 1996/1997

* Results subject to high sampling variability



**Table NIA-6:
Service Utilization, Niagara Region, 1996/1997**

Utilization Criteria	Ontario 12+	Ontario 65+	Niagara 65+
Has a regular doctor	94%	98%	97%
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%	96%

Source: The Ontario Health Survey, 1996/1997

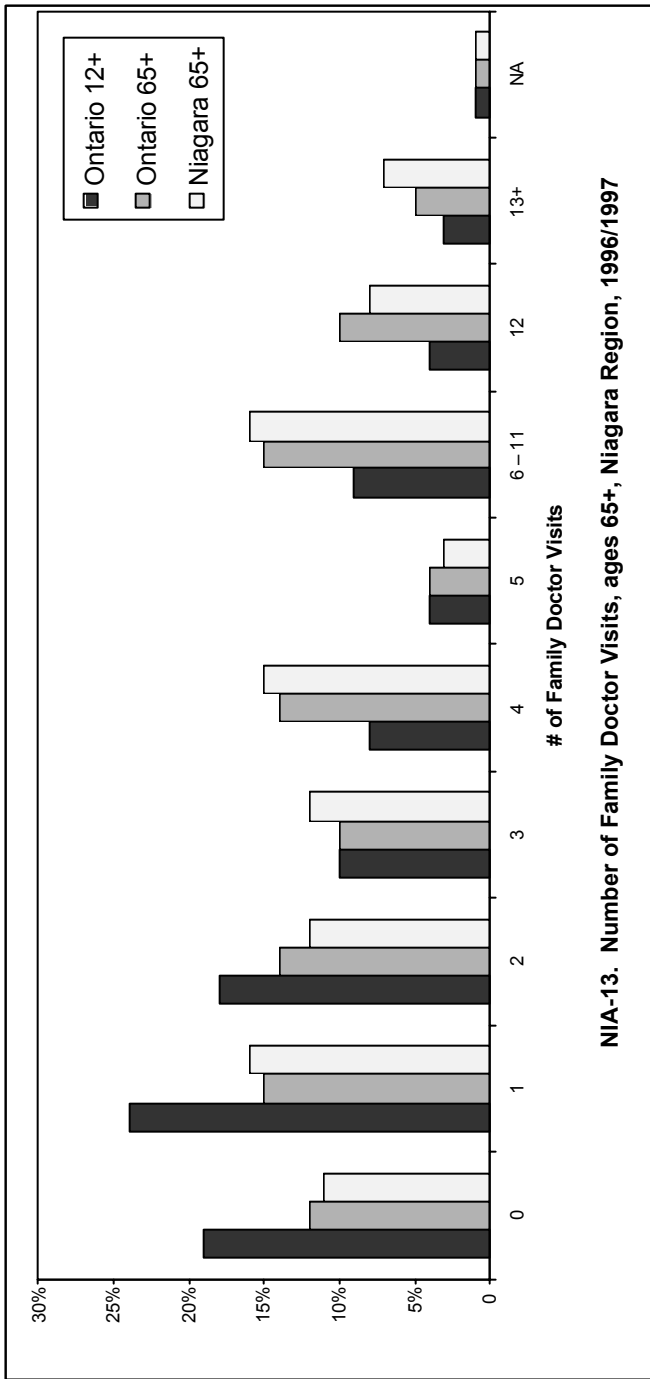
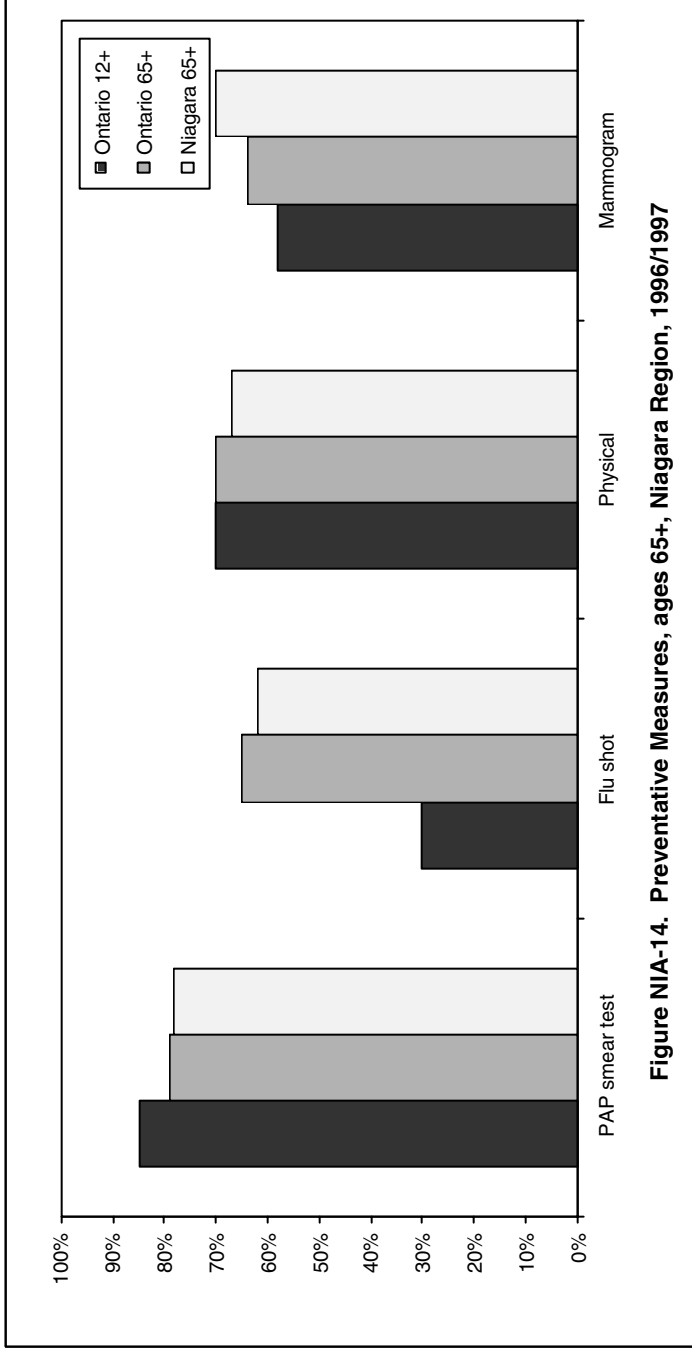


Table NIA-7:

Number of Family Doctor Visits, Niagara Region, 1996/1997	
Number of Family Doctor Visits	Niagara 65+
0	11%*
1	16%
2	12%*
3	12%*
4	15%
5	---
6-11	16%
12	8%*
13+	7%*
NA	1%*

Source: The Ontario Health Survey, 1996/1997
 * Results subject to high sampling variability



**Table NIA-8:
Preventative Measures, Niagara Region, 1996/1997**

Preventative Measure	Ontario 12+	Ontario 65+	Niagara 65+
Ever had a PAP smear test? (Women only)	85%	79%	78%
Ever had a Flu shot?	30%	65%	62%
Had Physical within last year?	70%	70%	67%
Ever had a mammogram? (Women only)	58%	64%	70%

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.'

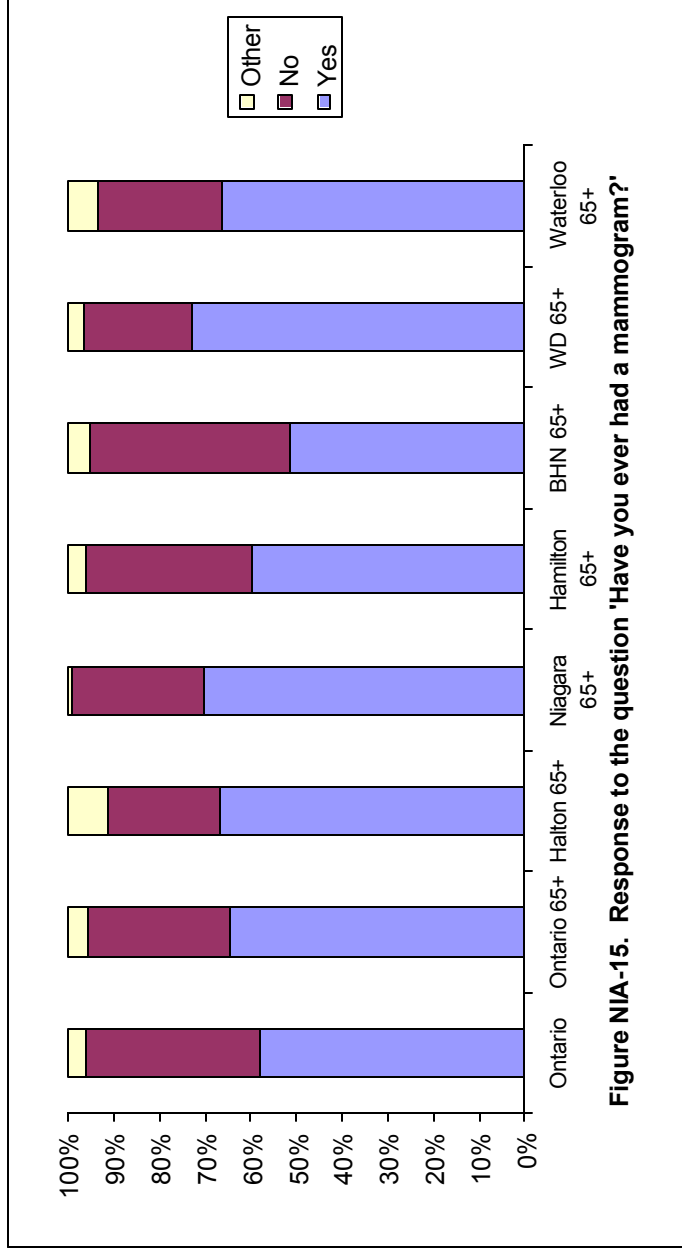


Figure NIA-15. Response to the question 'Have you ever had a mammogram?'

Table NIA-9: When was last mammogram? Niagara Region, 1996/1997

When last Mammogram?	Ontario 65+	Niagara 65+
Less than 1 year ago	45%	48%
Between 1 and 2 Years	24%	25%
Over 2 years	30%	27%

Source: The Ontario Health Survey, 1996/1997

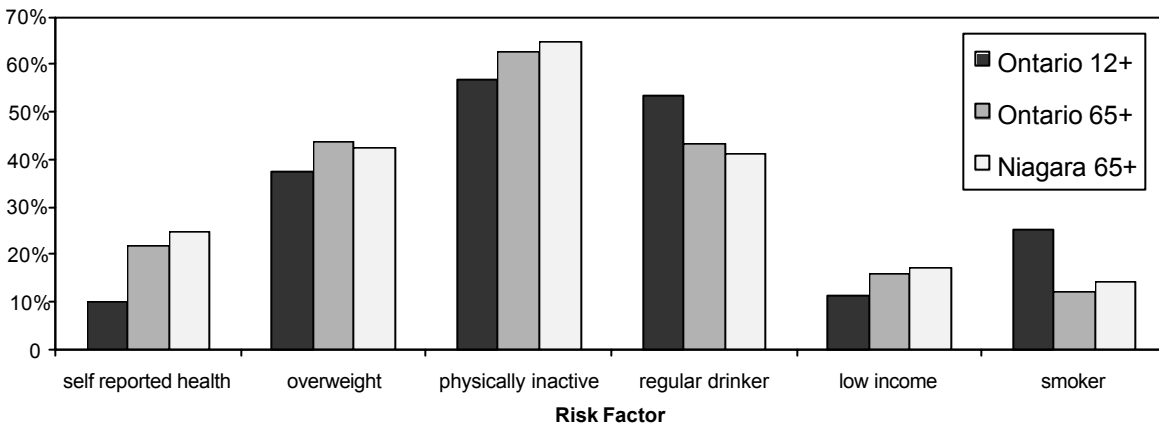


Figure NIA-16. Population risk factors, ages 65+, Niagara Region, 1996/1997

Risk Factor	Ontario 12+	Ontario 65+	Niagara 65+
Self-reported health was 'fair' or 'poor'	10%*	22%	25%
Self-reported to be 'overweight'	37%	44%	43%
Physically inactive	57%	63%	65%
Regular drinker	54%	43%	41%
Low Income	11%*	16%	17%
Smoker	25%	12%*	14%*

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 ¹
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 ²
Physically Inactive	Derived from many Questions.	Physically activity leads to a healthier lifestyle ³
Regular Drinker	Derived from many Questions.	Research has shown alcohol can lead to many health problems ⁴
Low Income	Derived from many Questions.	Research has linked low income to mortality ⁵
Smoker	Derived from many Questions.	Research has shown smoking can lead to many health problems ⁶

Source: The Ontario Health Survey, 1996/1997
* Results subject to high sampling variability

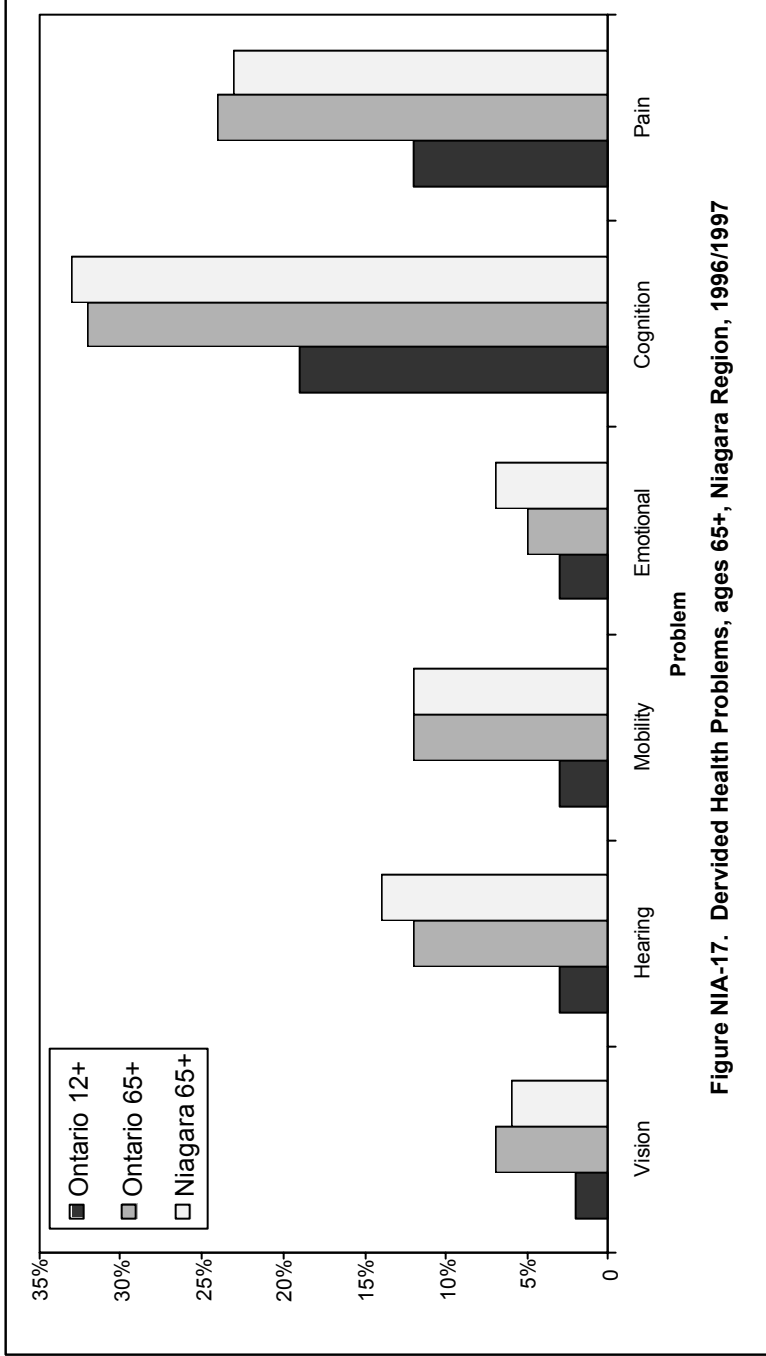


Figure NIA-17. Derived Health Problems, ages 65+, Niagara Region, 1996/1997

Table NIA-12: Derived Physical/Emotional Problems, Niagara Region, 1996/1997

Type of problem derived from the OHS	Ontario 12+	Ontario 65+	Niagara 65+
Has a vision problem beyond corrective lenses	----	7%*	6%*
Hearing	3%*	12%*	14%*
Mobility	3%*	12%*	12%*
Emotion – less than 'Somewhat Happy'	3%*	5%*	7%*
Cognition	19%	32%	33%
Is in some type of pain	12%*	24%	23%

Source: The Ontario Health Survey, 1996/1997

* Results subject to high sampling variability

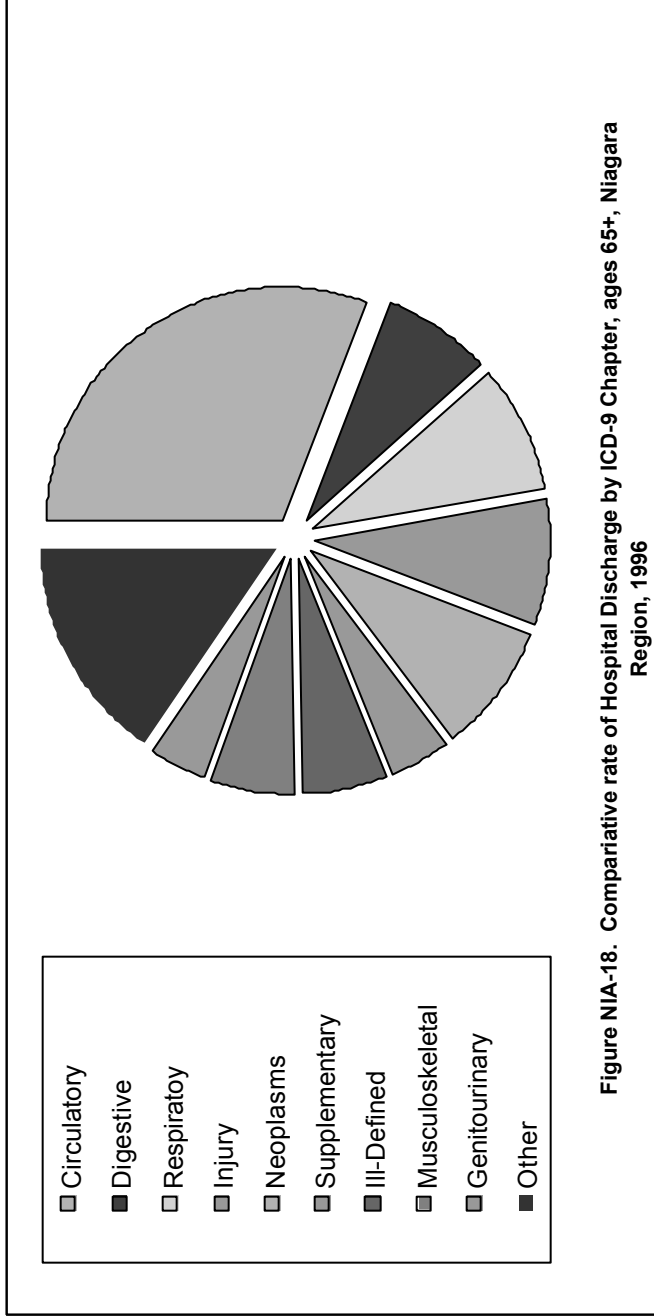


TABLE NIA-13: Comparative rate of Hospital Discharge by ICD-9 Chapter, ages 65+, 1996

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

Source: Provincial Health Planning Database, 2002

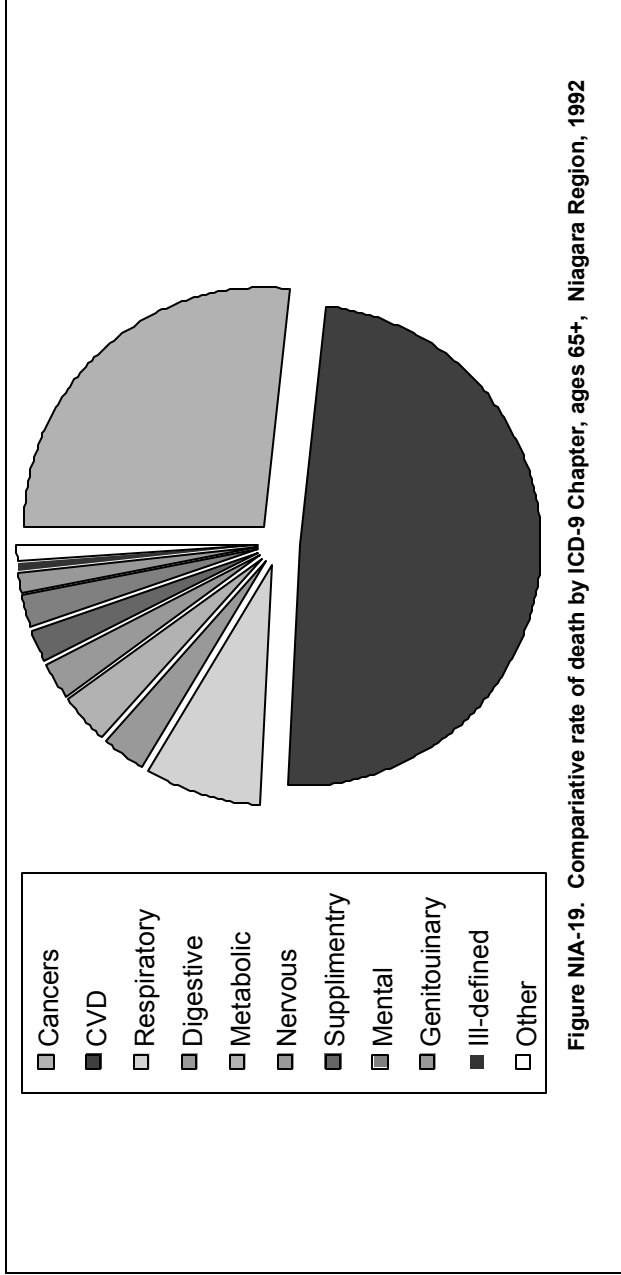


Table NIA-14: Comparative rate of death by ICD-9 Chapter, Niagara Region, 1992

ICD CHAPTER	Ontario	Ontario 65+	Niagara 65+
Neoplasms	27.90%	25.40%	26.80%
Diseases of the Circulatory System	39.70%	45.50%	49.00%
Diseases of the Respiratory System	8.10%	9.70%	7.90%
Diseases of the Digestive System	3.60%	3.40%	3.00%
Endocrine, Nutritional and Metabolic Disease and Immunity Disorders	3.10%	3.20%	3.40%
Disease of the Nervous System	2.80%	3.00%	2.50%
Supplementary Classification	5.70%	2.50%	2.00%
Mental Disorders	1.90%	2.10%	2.40%
Diseases of the Genitourinary System	1.50%	1.70%	1.30%
Symptoms, Signs, and ill-defined conditions	2.30%	2.50%	0.60%
Other	3.40%	1.00%	1.10%

Source: Health Planning System Initiative, 2000

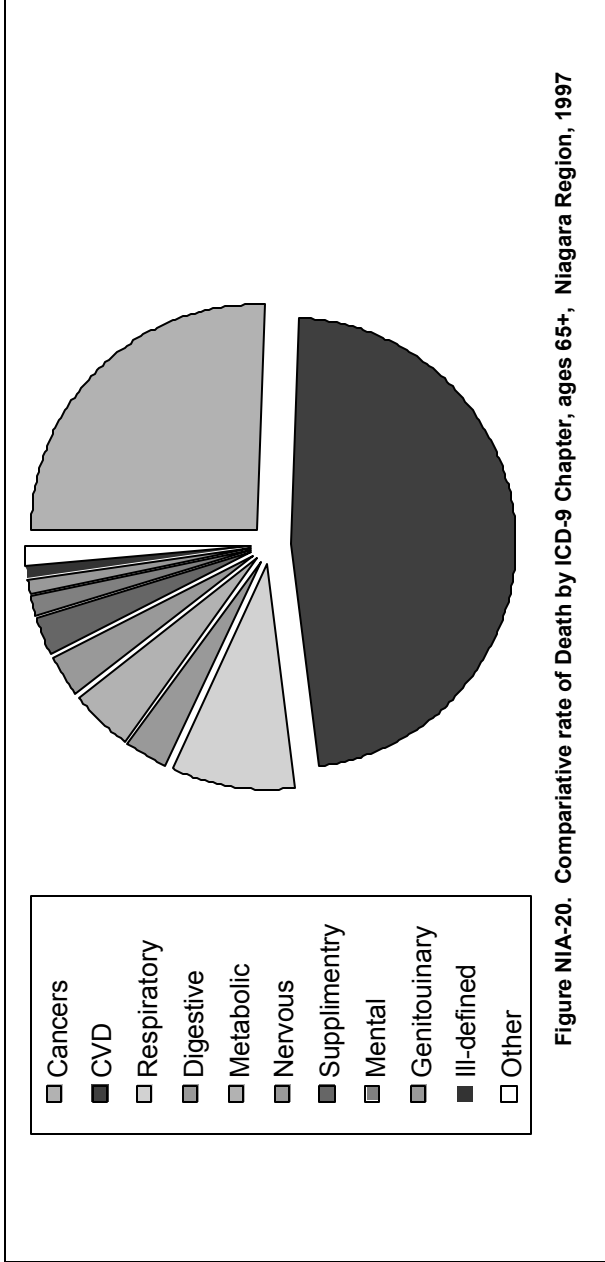


Table NIA-15: Comparative rate of death by ICD-9 Chapter, Niagara Region, 1997

ICD CHAPTER	Ontario	Ontario 65+	Niagara 65+
Neoplasms	27.98%	25.47%	25.60%
Diseases of the Circulatory System	38.04%	42.79%	47.55%
Diseases of the Respiratory System	8.68%	10.18%	8.79%
Diseases of the Digestive System	3.55%	3.46%	3.18%
Endocrine, Nutritional and Metabolic Disease and Immunity Disorders	3.54%	3.75%	4.28%
Disease of the Nervous System	3.03%	3.27%	3.08%
Supplementary Classification	5.60%	2.84%	2.92%
Mental Disorders	2.47%	2.82%	1.26%
Diseases of the Genitourinary System	1.62%	1.89%	1.23%
Symptoms, Signs, and ill-defined conditions	1.93%	2.84%	0.70%
Other	3.57%	0.69%	1.43%

Source: Health Planning System Initiative, 2000

Table NIA - 16: Age Specific Indirect Standardized Mortality Ratio, a 1992 County to Ontario Comparison							
Age	Brant	Hald-Nor	Halton	Hamilton	Niagara	Waterloo	Well-Duff
0-4	1.20	0.87	0.52	0.73	0.83	1.00	0.70
5-9	0	0.41	0.43	0.74	0.24	0.11	0.20
10-14	1.77	0.48	0.17	0.39	0.72	0.95	0.25
15-19	1.63	2.94	0.68	0.79	1.00	1.30	1.52
20-24	1.82	0.84	0.75	0.85	0.83	0.58	0.71
25-29	1.18	0.78	1.13	1.36	1.00	1.13	1.21
30-34	1.13	1.80	0.68	1.01	1.27	1.06	0.96
35-39	1.06	1.32	1.02	1.24	1.32	1.03	1.28
40-44	1.38	1.01	0.92	0.99	1.07	0.98	0.86
45-49	1.00	1.11	0.89	0.98	1.40	0.92	1.06
50-54	1.35	1.11	0.86	1.19	1.28	1.00	1.06
55-59	1.20	1.34	0.95	1.26	1.10	1.19	1.13
60-64	1.41	1.07	1.02	1.12	1.25	1.01	1.16
65-69	1.16	0.93	0.89	1.22	1.12	0.96	1.17
70-74	1.32	1.04	0.91	1.11	1.11	0.97	0.96
75-79	0.95	1.23	0.94	1.15	1.04	1.04	1.06
80-84	1.00	1.14	0.87	1.00	0.96	0.98	1.12
85+	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 NIA - 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

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.

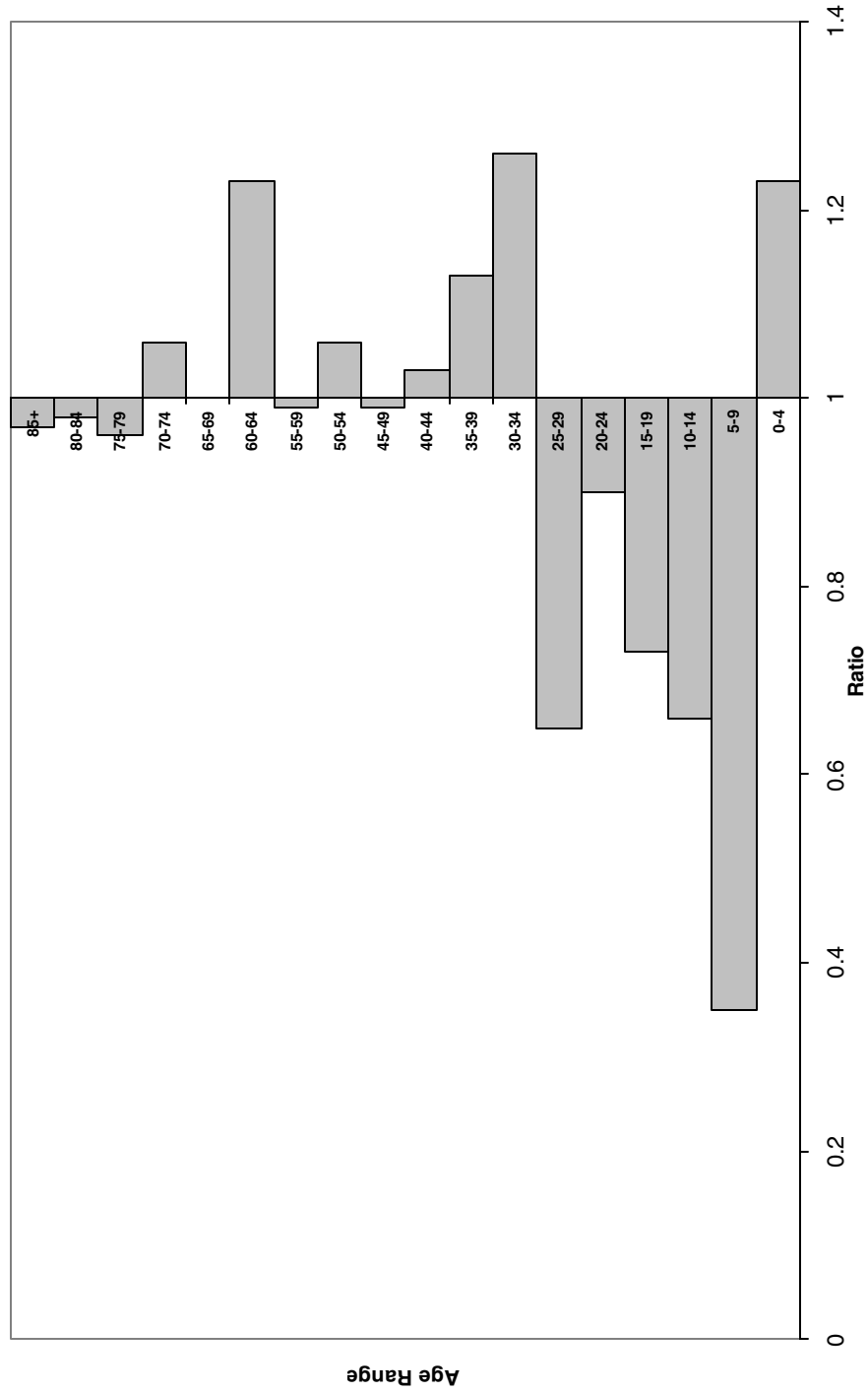


Figure NIA-21. Standardized Mortality Ratio, Niagara Region, 1997