

Asthma-Related Emergency Department Visit Crude Rates

	Asthma-Related Emergency Department Visit Crude Rates (per 100 Asthma Prevalence)																		
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020*	2021*
Age Group																			
All	9.32	9.06	8.89	8.79	8.21	7.87	8.81	7.74	7.74	7.79	7.17	7.96	7.56	7.21	7.59	6.80	6.90	2.91	3.81
0-4	29.82	28.63	31.18	29.98	29.01	27.43	33.44	32.11	33.48	32.93	32.92	36.40	36.17	33.88	35.39	34.40	33.69	5.36	27.76
5-9	7.41	7.51	8.47	7.39	7.42	7.19	9.64	7.45	8.36	7.67	7.07	8.63	8.21	7.41	8.03	6.90	7.67	1.78	3.45
10-14	4.67	4.36	4.77	4.31	4.05	4.15	5.77	3.91	4.33	3.98	3.39	4.38	3.91	3.74	4.09	3.41	3.80	1.18	1.84
15-19	6.16	5.57	5.94	5.75	5.31	5.29	6.49	4.53	4.70	4.86	4.14	5.01	4.64	4.61	4.80	4.22	4.50	1.91	2.88
20-29	6.46	5.91	5.88	5.87	5.34	5.11	5.90	4.61	4.49	4.50	4.10	4.41	4.27	4.01	4.10	3.79	4.21	1.98	2.48
30-39	6.12	6.13	5.87	6.15	5.92	5.64	6.34	5.63	5.49	5.49	5.00	5.29	4.94	4.54	4.82	4.23	4.52	1.99	2.23
40-49	5.93	6.16	5.44	6.02	5.70	5.48	6.10	5.34	5.15	5.54	5.10	5.34	5.24	4.82	5.39	4.61	5.02	2.46	2.65
50-59	7.63	7.98	7.02	7.63	7.13	6.88	7.31	6.85	6.61	6.83	6.51	6.94	6.79	6.57	6.96	6.19	6.37	3.31	3.54
60-69	12.16	12.28	11.09	11.63	10.82	10.63	9.75	9.61	9.25	9.67	8.80	9.63	9.25	9.07	9.52	8.62	8.31	4.30	4.52
70+	18.52	18.68	16.89	17.42	15.90	15.08	14.18	14.89	14.37	15.29	13.94	15.67	14.29	14.34	14.89	13.07	12.23	6.25	6.85
Sex																			
Female	9.30	9.14	8.89	8.98	8.36	8.14	9.04	8.03	8.04	8.15	7.52	8.39	7.98	7.65	8.09	7.25	7.37	3.18	4.04
Male	9.36	8.97	8.88	8.58	8.05	7.58	8.56	7.42	7.42	7.40	6.78	7.48	7.10	6.72	7.06	6.31	6.38	2.62	3.57
Deprivation Quintile[†]																			
Q1 (least marginalized)	5.54	6.24	6.18	5.91	5.59	5.17	6.69	5.83	5.85	5.99	5.40	5.50	5.22	4.90	5.27	4.65	4.73	2.04	2.79
Q2	7.62	7.57	7.46	7.38	6.97	6.59	7.93	6.91	6.96	6.94	6.24	6.76	6.43	6.05	6.36	5.65	5.71	2.40	3.29
Q3	9.43	8.88	8.70	8.68	8.04	7.83	9.06	7.86	7.86	7.75	7.07	7.81	7.35	7.08	7.45	6.67	6.80	2.85	3.65
Q4	11.63	10.11	9.98	9.94	9.34	9.12	9.24	8.11	7.99	8.09	7.47	8.81	8.41	8.09	8.58	7.62	7.84	3.24	4.16
Q5 (most marginalized)	11.94	11.56	11.42	11.56	10.83	10.51	10.28	9.17	9.27	9.36	8.88	10.66	10.21	9.84	10.29	9.43	9.48	4.11	5.29
Income Quintile																			
Q1 (lowest)	12.26	11.42	11.24	11.39	10.62	10.38	11.58	10.36	10.40	10.42	9.76	10.77	10.30	9.85	10.29	9.43	9.53	4.18	5.31
Q2	10.08	9.64	9.49	9.43	8.86	8.41	9.36	8.36	8.30	8.30	7.72	8.60	8.18	7.89	8.28	7.35	7.58	3.15	4.05
Q3	8.96	8.80	8.66	8.46	7.94	7.64	8.60	7.41	7.43	7.51	6.90	7.60	7.21	6.95	7.36	6.62	6.75	2.75	3.64
Q4	8.17	8.22	8.00	7.82	7.27	7.01	7.72	6.75	6.78	6.82	6.17	7.01	6.60	6.25	6.62	5.83	5.84	2.44	3.36
Q5 (highest)	6.99	6.84	6.76	6.65	6.24	5.83	6.75	5.78	5.81	5.89	5.33	5.72	5.43	5.08	5.39	4.76	4.82	2.07	2.77
Rurality[‡]																			
Urban	7.74	7.59	7.44	7.30	6.88	6.51	7.52	6.64	6.66	6.77	6.32	7.06	6.74	6.43	6.81	6.14	6.24	2.73	3.55
Rural	21.29	20.88	20.64	21.06	19.33	19.38	19.95	17.33	17.21	16.88	14.75	16.88	15.72	14.99	15.38	13.29	13.34	4.65	6.37
Local Health Integration Network																			
1. Erie St. Clair	12.62	12.07	11.14	10.67	10.43	9.74	10.87	9.33	9.20	9.24	8.45	9.28	8.73	8.23	8.21	7.24	6.92	2.91	4.05
2. South West	15.53	14.97	15.61	14.83	14.58	13.71	15.14	13.03	13.41	13.18	11.70	13.09	12.33	11.93	12.63	11.19	11.07	4.19	5.87
3. Waterloo Wellington	9.00	8.21	7.95	7.58	7.33	7.13	7.84	7.07	6.97	6.84	5.95	6.92	6.59	6.07	6.42	5.47	5.67	2.55	3.38
4. Hamilton Niagara Haldimand Brant	10.83	10.17	9.81	9.67	9.05	8.48	9.38	8.67	8.84	8.81	8.52	9.15	8.78	8.39	8.64	7.52	7.76	3.33	4.65
5. Central West	5.59	5.28	5.29	5.05	4.88	4.60	6.04	4.98	5.09	5.06	4.84	5.39	4.99	4.83	6.34	6.00	6.26	2.39	2.82
6. Mississauga Halton	5.26	5.21	5.10	4.99	4.78	4.41	5.47	4.81	4.73	4.64	4.46	4.91	4.56	4.53	4.76	4.29	4.63	1.81	2.54
7. Toronto Central	5.74	5.75	5.68	5.60	5.42	5.01	5.92	5.50	5.48	5.68	5.31	5.63	5.26	5.39	5.45	4.99	5.23	2.59	2.69
8. Central	4.83	5.26	5.08	4.94	4.68	4.47	5.46	4.78	4.61	4.95	4.79	5.32	5.41	5.12	5.43	4.92	5.05	2.26	3.18
9. Central East	7.85	7.68	7.55	7.29	6.68	6.61	7.26	6.62	6.71	6.71	6.21	7.08	6.78	6.26	6.59	5.99	6.06	2.53	3.39
10. South East	14.44	14.22	14.17	15.58	14.17	14.30	14.63	12.96	12.77	13.04	10.49	12.62	12.19	11.61	11.84	10.94	10.93	4.66	5.59
11. Champlain	10.52	10.28	9.99	10.47	8.92	8.97	9.79	8.62	8.16	8.17	7.53	8.65	7.75	7.27	7.57	6.85	6.66	3.03	3.78
12. North Simcoe Muskoka	13.36	12.04	12.19	12.69	11.87	10.62	11.05	10.05	10.68	10.35	9.32	10.25	9.48	8.56	9.38	8.25	8.12	3.45	4.51
13. North East	17.98	17.97	17.48	17.34	15.86	16.19	17.18	13.68	14.50	14.45	13.16	14.38	13.88	13.47	14.07	12.38	12.42	4.61	6.08
14. North West	19.18	18.17	18.23	18.11	18.24	16.21	18.99	16.17	15.58	17.29	15.78	15.58	15.81	15.26	13.82	11.27	11.95	4.63	5.99

Asthma-Related Emergency Department Visit Crude Rates (cont'd)

Public Health Unit	Asthma-Related Emergency Department Visit Crude Rates (per 100 Asthma Prevalence)																		
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020*	2021*
Algoma	22.68	23.60	23.46	22.83	20.24	18.93	19.07	15.74	16.28	16.68	15.26	17.32	15.71	15.18	16.66	15.02	13.94	5.08	6.12
Brant	9.66	9.56	9.11	10.41	9.83	8.98	9.64	8.59	9.76	9.75	10.17	11.89	10.95	10.13	10.77	9.88	10.43	4.56	5.76
Durham	5.94	5.79	5.68	5.42	5.11	5.09	5.78	5.01	5.04	5.19	4.87	5.47	5.08	4.63	5.01	4.40	4.59	2.14	3.04
Elgin-St Thomas	10.67	10.69	10.94	10.29	10.76	10.29	12.54	11.76	11.99	13.18	12.53								
Grey-Bruce	31.30	31.06	28.89	28.62	28.24	28.48	29.66	24.33	25.81	24.98	21.21	23.87	21.88	21.32	22.18	19.57	18.96	6.27	8.81
Haldimand-Norfolk	15.88	15.99	14.91	15.27	14.15	14.67	15.75	15.10	16.06	16.30	15.10	16.43	14.34	13.44	13.99	11.67	11.65	3.77	5.92
Haliburton Kawartha, Pine Ridge	19.13	18.10	17.99	17.24	15.49	15.30	15.55	14.27	14.22	14.08	11.57	14.09	14.60	13.23	12.04	11.35	10.77	4.56	5.72
Halton	6.22	5.64	5.85	5.49	5.02	4.48	5.59	4.61	4.59	4.38	4.05	4.49	4.22	4.23	4.57	4.07	4.33	1.87	2.80
Hamilton	8.99	8.72	8.22	7.68	7.63	7.17	8.21	7.55	8.43	8.20	8.16	8.79	8.20	7.79	8.11	7.20	7.60	3.71	5.16
Hastings Prince Edward	16.79	16.97	16.93	17.69	15.79	16.07	16.10	14.27	14.08	14.64	11.66	14.14	14.20	13.17	13.60	13.02	13.03	5.28	6.30
Huron	24.47	23.29	25.06	25.12	24.91	25.50	26.75	24.57	26.38	23.36	19.98	22.86	22.60	20.10	22.06	18.72	18.59	6.35	8.18
Chatham-Kent	18.23	17.46	16.56	15.96	15.52	13.46	14.40	12.66	12.74	12.20	10.50	12.10	11.35	11.62	12.63	10.94	9.39	3.58	5.01
Kingston Frontenac, and Lennox and Addington	10.94	10.12	10.12	11.79	11.31	11.11	11.86	10.49	10.33	10.49	8.56	10.49	10.18	9.48	9.42	9.15	9.07	4.27	4.72
Lambton	18.43	19.06	18.95	17.64	17.85	17.10	19.64	16.37	17.26	17.30	15.20	17.98	16.33	14.33	14.47	12.52	11.45	4.37	6.69
Leeds, Grenville, Lanark	20.16	19.67	20.29	21.96	19.16	19.43	19.66	17.27	16.32	16.04	13.13	14.74	13.20	13.28	14.20	11.08	11.25	4.30	5.87
Middlesex-London	7.64	7.93	9.67	9.02	9.25	7.70	9.32	7.61	7.63	7.64	7.02	7.68	7.28	7.47	8.04	7.29	7.18	3.26	4.64
Niagara	13.77	12.10	11.96	11.79	10.60	9.90	10.85	10.15	9.38	9.48	8.96	9.15	9.49	9.23	9.23	7.73	7.69	2.96	4.24
North Bay Parry Sound	18.81	19.25	18.23	18.60	16.02	17.26	17.64	14.81	16.38	15.55	14.76	16.06	14.81	14.50	14.69	11.65	12.20	4.56	5.79
Northwestern	22.61	27.05	26.24	25.41	26.82	23.11	25.44	20.38	18.31	19.47	16.93	18.72	18.58	18.27	17.44	15.18	15.13	4.85	6.68
Ottawa	5.74	5.65	5.41	5.61	4.82	4.62	5.80	4.88	4.78	4.98	4.48	5.33	4.84	4.66	4.92	4.74	4.65	2.37	2.80
Oxford	20.26	20.62	20.10	20.32	18.21	17.48	18.39	16.93	16.54	17.03	15.55								
Peel	4.70	4.69	4.53	4.37	4.21	3.99	5.23	4.44	4.52	4.49	4.26	4.74	4.39	4.32	5.36	5.14	5.41	2.11	2.56
Perth	18.05	11.90	13.99	12.50	12.67	12.22	12.33	12.52	12.73	11.94	10.45	11.75	10.12	9.63	12.24	9.83	10.44	3.59	5.22
Peterborough	16.01	15.25	14.27	13.71	11.58	11.40	11.29	10.70	10.90	9.81	8.66	10.90	9.87	8.72	9.64	8.91	8.72	3.50	4.19
Porcupine	27.52	30.23	28.37	27.62	27.34	29.37	30.81	22.60	23.14	25.47	21.33	24.12	24.90	23.29	23.72	21.04	22.80	7.14	10.54
Renfrew	23.95	25.46	26.73	28.55	25.32	27.15	26.18	24.29	21.81	21.43	20.55	23.48	21.10	19.55	20.95	18.43	17.07	4.97	7.16
Eastern Ontario	19.00	17.92	16.37	17.62	14.55	15.20	15.38	14.28	13.76	13.47	13.04	14.53	12.83	11.53	11.36	10.05	9.74	4.81	5.98
Simcoe Muskoka	13.33	12.22	12.22	12.67	11.91	10.60	10.81	9.68	10.16	10.11	9.06	9.97	9.34	8.51	9.21	8.06	7.93	3.36	4.50
Sudbury	9.04	8.14	8.56	8.64	7.86	7.40	8.91	6.96	7.80	7.36	7.33	7.89	7.59	7.50	7.86	7.43	7.15	3.26	4.32
Thunder Bay	17.85	14.66	15.04	15.21	14.85	13.48	16.48	14.57	14.55	16.46	15.35	14.39	14.74	14.10	12.43	9.76	10.72	4.54	5.73
Timiskaming	42.28	37.80	35.58	34.19	31.59	35.13	36.30	29.85	29.38	28.09	23.39	22.77	23.66	23.88	25.16	22.01	21.66	6.83	9.06
Waterloo	7.75	7.03	6.59	5.82	5.73	5.74	6.34	5.75	5.56	5.46	4.87	5.74	5.66	5.09	5.33	4.58	4.90	2.39	3.11
Wellington-Dufferin-Guelph	11.22	9.89	9.84	9.92	9.38	8.86	9.85	8.82	8.39	8.79	7.47	8.48	7.71	7.52	7.98	6.56	6.69	2.60	3.64
Windsor-Essex	8.23	7.35	6.25	6.18	5.93	5.75	6.44	5.65	5.14	5.38	5.41	5.37	5.35	5.21	4.89	4.48	4.75	2.25	2.90
York Region	4.13	4.43	4.40	4.11	3.92	3.69	4.63	3.98	3.98	4.19	3.99	4.48	4.62	4.44	4.84	4.43	4.54	2.17	3.09
Southwestern												16.48	15.87	14.48	14.62	13.27	13.27	4.59	6.42
Toronto	5.19	5.45	5.39	5.36	5.19	4.96	6.04	5.60	5.55	5.74	5.62	6.02	5.77	5.63	5.85	5.30	5.56	2.39	2.82

* Reporting period is from April 2003 to March 2022. Data for 2020 and 2021 may be incomplete due to the 2-year algorithm to identify asthma, and numbers are subject to change.

† Ontario Marginalization Index expressed in quintiles used as a proxy measure of socioeconomic status.

‡ Rural communities defined as those with fewer than 10,000 people.

Note: Asthma prevalence with missing LHIN, rurality, or PHU were excluded from the report.

Asthma-related ED were captured from the main problem diagnosis code in NACRS.

PHU of Elgin and St. Thomas (2231) and Oxford Health Unit (2252) were merged in 2014 and now the PHU is named Southwestern Public Health (2275)

Source: This table uses statistics reported by the Ontario Asthma Surveillance Information System (OASIS) and data provided by ICES, Ontario.