

Supplementary Table 1. Principal diagnosis of 6077 cases with a hospitalization for infectious gastroenteritis, 45 and Up Study

Primary diagnosis	% (N)
Gastrointestinal infectious	53.7% (3,261)
Infectious other than gastrointestinal infectious	1.5% (89)
Cardiovascular	6.6% (402)
Neoplasm	1.1% (69)
Renal	3.8% (229)
Respiratory	5.9 % (358)
Digestive	8.9% (543)
Symptoms not elsewhere classified	8.2% (500)
Others	10.3% (626)

Supplementary Table 2. Associations between sociodemographic, health characteristics, and other factors and gastroenteritis hospitalization using only those with a principal diagnosis of infectious gastroenteritis and including those with pre-existing conditions (see sensitivity analysis description in methods)

	Variables	Case with primary diagnosis only*			Case including pre-existing conditions#		
		HR	95%CI		HR	95%CI	
Sex	Female	1.00			1.00		
	Male	0.75	0.69	0.81	0.83	0.79	0.88
Household income	<\$20000	1.00			1.00		
	\$20000-29999	0.88	0.78	1.00	0.93	0.86	1.02
	\$30000-39999	0.95	0.82	1.10	0.96	0.87	1.06
	\$40000-49999	0.93	0.79	1.09	0.93	0.83	1.05
	\$50000-69999	0.92	0.79	0.07	0.91	0.81	1.01
	+\$70,000	0.80	0.70	0.93	0.85	0.77	0.94
	Unknown	0.99	0.91	1.09	1.04	0.97	1.11
Region of residence	Cities	1.00			1.00		
	Inner regional	1.10	1.02	1.20	0.87	0.82	0.92
	Outer regional	1.25	1.14	1.37	0.89	0.84	0.95
Living in aged care facilities	No	1.00			1.00		
	Yes	0.75	0.51	1.11	1.00	0.80	1.25
	Unknown	1.37	1.03	1.82	1.34	1.10	1.63
Proton pump inhibitor usage	No	1.00			1.00		
	Yes	1.74	1.61	1.89	1.52	1.44	1.61
Fruit and vegetable intake	Low	1.00			1.00		
	Adequate	0.99	0.91	1.08	1.02	0.96	1.08
	Unknown	1.05	0.95	1.16	1.04	0.97	1.12
Chicken/poultry intake	Yes	1.00			1.00		
	No	1.04	0.88	1.23	1.05	0.93	1.17
	Unknown	0.84	0.77	0.92	0.83	0.78	0.88
Egg consumption	Yes	1.00			1.00		
	No	1.24	1.04	1.46	1.05	0.93	1.19
Seafood intake	Yes	1.00			1.00		
	No	1.16	0.93	1.45	1.19	1.02	1.39
	Unknown	0.93	0.79	1.09	1.00	0.90	1.11
BMI	Underweight	1.15	0.89	1.50	1.27	1.07	1.50
	Normal	1.00			1.00		
	Overweight	1.02	0.94	1.12	0.99	0.93	1.05
	Obese	1.12	1.02	1.22	1.06	1.00	1.13
	Unknown	1.43	1.06	1.92	1.41	1.15	1.73
Self-rated health	Excellent	1.00			1.00		
	Very good	1.32	1.13	1.54	1.17	1.06	1.31
	Good	1.71	1.47	1.99	1.70	1.53	1.88
	Fair	2.53	2.15	2.97	2.79	2.50	3.12
	Poor	3.45	2.80	4.26	4.16	3.61	4.78
	Unknown	2.21	1.78	2.73	2.26	1.96	2.61

* Cases include participants with a hospitalisation for gastroenteritis as a primary diagnosis only

Cases include participants with a hospitalisation for chronic bowel problems, immunosuppressive disorders and cancer as a primary diagnosis, before recruitment by repeating the analysis including those with pre-existing conditions

HR adjusted for age, sex, household income, university degree, region of residence, living in aged care facilities, proton pump inhibitor usage, fruit and vegetable, chicken/poultry, egg and seafood intake, alcohol use, smoking, BMI, and self-rated health