

## Supplementary material

### The trend of emergency consultations in children

Santiago region presents a population of 1,461,999 inhabitants between 0 and 14 ages old. Valparaiso presents nearly a quarter of the Santiago population of 356,606 with the same ages. Over 2010 and 2013, Santiago presented larger rates of Bronchitis, Acute upper respiratory infection and Pneumonia (as emergency consultations per 1,000 inhabitants). Valparaiso only shows a higher rate for chronic lower respiratory diseases.

Children under one-year-old were the group with larger rates of emergency respiratory consultations followed by children between one and four years old and finally the group of 5 to 14 years old (Table Supplementary 2 and 3). For all age groups, respiratory consultations were more frequent for acute upper respiratory infections, with rates up to ten times higher than pneumonia, followed by bronchitis and chronic lower respiratory disease.

**Table S1.** Rates of respiratory illness (emergency consultations per 1,000 inhabitants), according to CIE10, for children under 14 years all and living in Santiago from 2010 to 2013.

Emergency consultations	Age Group	2010	2011	2012	2013	Median (2010-2013)
Bronchitis (J20-21)	< 1 year	443.7	428.0	392.0	367.1	410.0
	1 to 4	212.2	195.1	179.7	171.7	187.4
	5 to 14	45.8	37.2	37.6	34.9	37.4
Chronic lower respiratory disease (J40-46)	< 1 year	249.4	249.4	216.5	195.3	233.0
	1 to 4	109.7	107.8	89.9	89.1	98.9
	5 to 14	16.9	15.5	13.8	13.1	14.7
Acute upper respiratory infection (J00-06)	< 1 year	854.2	758.4	719.7	670.9	739.1
	1 to 4	637.7	561.9	579.1	563.5	571.3
	5 to 14	252.5	206.8	234.4	215.6	225.0
Pneumonia (J12-18)	< 1 year	86.7	73.7	65.3	58.0	69.5
	1 to 4	42.0	37.3	31.2	31.5	34.4
	5 to 14	6.7	6.0	5.1	4.7	5.6

**Table S2.** Rates of respiratory illness (emergency consultations per 1,000 inhabitants) according to CIE10, for children under 14 years all and living in Valparaiso from 2010 to 2013.

Emergency consultations	Age Group	2010	2011	2012	2013	Median (2010-2013)
Bronchitis (J20-21)	< 1 year	168.5	159.1	165.0	192.2	166.8
	1 to 4	94.1	91.9	88.7	100.9	93.0
	5 to 14	25.3	24.6	25.3	28.7	25.3
Chronic lower respiratory disease (J40-46)	< 1 year	274.8	308.6	268.2	285.5	280.2
	1 to 4	111.7	125.0	111.2	121.5	116.6
	5 to 14	26.1	26.6	22.0	23.8	25.0
Acute upper respiratory infection (J00-06)	< 1 year	718.7	669.2	660.8	707.5	688.4
	1 to 4	517.7	493.9	485.2	494.7	494.3
	5 to 14	204.1	191.9	193.9	189.5	192.9
Pneumonia (J12-18)	< 1 year	53.1	60.0	56.2	52.8	54.7
	1 to 4	32.6	37.4	35.9	32.5	34.3
	5 to 14	6.8	6.9	7.1	6.2	6.9