

**Table S3. Estimated annual influenza-attributable hospitalisation rate<sup>a</sup> by influenza type, principal diagnosis, age group and year, Australia, 2001-2013.**

Principal Diagnosis	Year	Hospitalization rate – attributable to Influenza A (95%CI)				
		Age group				
		0-14 years	15-64 years	65-84 years	≥85 years	All-ages
Influenza and Pneumonia	2001 (Jul-Dec)	<b>19.5 (12.5, 26.5)</b>	<b>14.1 (11.8, 16.5)</b>	<b>17.1 (2.5, 31.7)</b>	<b>98.5 (35.2, 161.8)</b>	<b>16.7 (13.1, 20.3)</b>
	2002	<b>36.9 (29.7, 44.1)</b>	<b>9.9 (7.5, 12.3)</b>	<b>61.4 (46.3, 76.5)</b>	<b>281.7 (216.2, 347.2)</b>	<b>25.0 (21.3, 28.7)</b>
	2003	<b>68.7 (63.7, 73.8)</b>	<b>20.6 (18.9, 22.2)</b>	<b>109.3 (98.7, 119.8)</b>	<b>374.7 (328.9, 420.4)</b>	<b>45.3 (42.7, 47.9)</b>
	2004	<b>37.5 (21.8, 53.2)</b>	<b>17.5 (12.3, 22.6)</b>	<b>88.6 (55.9, 121.4)</b>	<b>336.9 (194.8, 479.0)</b>	<b>34.2 (26.2, 42.2)</b>
	2005	-0.8 (-15.4, 13.8)	<b>18.5 (13.7, 23.4)</b>	<b>32.8 (2.1, 63.4)</b>	<b>462.1 (329.4, 594.8)</b>	<b>23.0 (15.5, 30.5)</b>
	2006	3.5 (-16.3, 23.3)	<b>7.3 (0.7, 13.8)</b>	38.8 (-2.6, 80.3)	-54.8 (-234.3, 124.8)	9.2 (-0.9, 19.4)
	2007	<b>31.2 (24.7, 37.7)</b>	<b>15.5 (13.4, 17.7)</b>	<b>46.7 (33.0, 60.3)</b>	<b>253.0 (193.7, 312.3)</b>	<b>26.0 (22.7, 29.4)</b>
	2008	-11.6 (-29.3, 6.1)	-17.5 (-23.3, -11.6)	36.2 (-0.8, 73.1)	-97.1 (-257.4, 63.2)	-11.4 (-20.5, -2.4)
	2009	<b>42.2 (36.8, 47.5)</b>	<b>37.6 (35.8, 39.4)</b>	<b>34.5 (23.3, 45.6)</b>	<b>110.8 (62.4, 159.3)</b>	<b>39.4 (36.6, 42.1)</b>
	2010	<b>27.2 (14.9, 39.6)</b>	<b>20.9 (16.9, 25.0)</b>	13.4 (-12.4, 39.2)	-51.4 (-163.2, 60.4)	<b>20.0 (13.7, 26.3)</b>
	2011	-29.8 (-50.3, -9.4)	<b>11.4 (4.7, 18.2)</b>	<b>52.5 (9.7, 95.3)</b>	153.0 (-32.7, 338.6)	11.1 (0.6, 21.6)
	2012	<b>18.6 (9.8, 27.5)</b>	<b>19.6 (16.7, 22.5)</b>	<b>86.6 (68.0, 105.1)</b>	<b>442.2 (361.8, 522.5)</b>	<b>35.5 (31.0, 40.0)</b>
	2013	-15.0 (-52.8, 22.7)	<b>18.1 (5.6, 30.5)</b>	<b>118.3 (39.4, 197.3)</b>	246.0 (-96.5, 588.4)	<b>28.0 (8.7, 47.3)</b>
Respiratory	2001 (Jul-Dec)	36.1 (-9.9, 82.1)	<b>35.5 (26.3, 44.8)</b>	<b>55.5 (20.4, 90.7)</b>	<b>173.6 (58.1, 289.0)</b>	<b>39.7 (24.7, 54.7)</b>
	2002	<b>114.2 (66.6, 161.8)</b>	<b>18.0 (8.4, 27.5)</b>	<b>208.5 (172.2, 244.9)</b>	<b>585.5 (466.2, 704.9)</b>	<b>66.8 (51.2, 82.3)</b>
	2003	<b>129.9 (96.6, 163.1)</b>	<b>51.2 (44.5, 57.8)</b>	<b>347.9 (322.5, 373.3)</b>	<b>850.2 (766.8, 933.6)</b>	<b>111.8 (101.0, 122.7)</b>
	2004	88.1 (-15.3, 191.4)	<b>56.4 (35.7, 77.1)</b>	<b>260.5 (181.5, 339.4)</b>	<b>481.2 (222.0, 740.4)</b>	<b>92.2 (58.4, 125.9)</b>
	2005	-16.5 (-113.0, 80.0)	<b>36.3 (17.0, 55.7)</b>	<b>222.0 (148.3, 295.7)</b>	<b>896.3 (654.2, 1138.3)</b>	<b>60.1 (28.5, 91.6)</b>
	2006	42.3 (-88.3, 172.8)	21.5 (-4.7, 47.7)	<b>109.0 (9.3, 208.8)</b>	154.0 (-173.4, 481.5)	37.8 (-4.8, 80.5)
	2007	<b>69.4 (26.3, 112.5)</b>	<b>35.4 (26.7, 44.0)</b>	<b>137.9 (105.0, 170.8)</b>	<b>372.4 (264.3, 480.5)</b>	<b>59.3 (45.2, 73.3)</b>
	2008	-89.3 (-205.9, 27.2)	-23.9 (-47.3, -0.5)	<b>92.1 (3.0, 181.1)</b>	-25.6 (-318.0, 266.7)	-23.3 (-61.4, 14.7)
	2009	19.7 (-15.6, 54.9)	<b>60.5 (53.4, 67.5)</b>	<b>74.1 (47.1, 101.0)</b>	<b>301.1 (212.8, 389.5)</b>	<b>58.3 (46.8, 69.8)</b>
	2010	-16.3 (-97.6, 65.0)	<b>31.0 (14.7, 47.3)</b>	15.9 (-46.2, 78.0)	-92.8 (-296.7, 111.1)	18.3 (-8.2, 44.9)
	2011	-88.5 (-223.5, 46.5)	-14.6 (-41.7, 12.5)	92.0 (-11.1, 195.1)	<b>403.9 (65.2, 742.5)</b>	-8.2 (-52.3, 35.8)
	2012	-39.8 (-98.2, 18.6)	<b>37.8 (26.1, 49.5)</b>	<b>266.9 (222.3, 311.5)</b>	<b>866.2 (719.7, 1012.6)</b>	<b>66.8 (47.7, 85.8)</b>
	2013	-79.7 (-328.6, 169.3)	25.6 (-24.3, 75.6)	<b>210.4 (20.3, 400.6)</b>	-103.3 (-727.8, 521.2)	23.6 (-57.7, 104.9)
Hospitalization rate – attributable to Influenza B (95%CI)						
Principal Diagnosis	Year	Age group				
		0-14 years	15-64 years	65-84 years	≥85 years	All-ages

Influenza and Pneumonia	2001 (Jul-Dec)	4.7 (-3.9, 13.4)	0.8 (-2.1, 3.6)	<b>22.9 (4.8, 40.9)</b>	<b>114.1 (35.8, 192.4)</b>	<b>5.7 (1.3, 10.1)</b>
	2002	<b>25.3 (17.7, 33.0)</b>	<b>8.3 (5.7, 10.8)</b>	1.1 (-15.0, 17.2)	<b>119.2 (49.5, 188.9)</b>	<b>12.5 (8.6, 16.4)</b>
	2003	-4.0 (-13.1, 5.2)	2.5 (-0.5, 5.6)	1.6 (-17.6, 20.7)	-109.4 (-192.4, -26.5)	-0.5 (-5.1, 4.2)
	2004	5.5 (-11.4, 22.4)	1.6 (-4.0, 7.2)	33.7 (-1.7, 69.1)	-98.8 (-252.3, 54.7)	4.6 (-4.0, 13.3)
	2005	<b>27.6 (12.7, 42.6)</b>	<b>6.1 (1.2, 11.1)</b>	<b>46.2 (14.9, 77.4)</b>	-108.7 (-244.2, 26.7)	<b>13.2 (5.6, 20.9)</b>
	2006	<b>39.1 (18.8, 59.3)</b>	<b>9.0 (2.3, 15.6)</b>	-2.4 (-44.7, 39.9)	<b>265.4 (82.0, 448.9)</b>	<b>17.5 (7.2, 27.9)</b>
	2007	<b>23.0 (13.5, 32.4)</b>	-1.4 (-4.5, 1.8)	-14.0 (-33.8, 5.8)	-209.7 (-295.4, -124.0)	-1.5 (-6.3, 3.4)
	2008	<b>32.1 (19.2, 45.0)</b>	<b>22.8 (18.5, 27.1)</b>	<b>37.4 (10.4, 64.5)</b>	<b>190.0 (72.8, 307.3)</b>	<b>29.1 (22.4, 35.7)</b>
	2009	-9.6 (-18.4, -0.8)	-14.0 (-16.9, -11.1)	<b>21.9 (3.6, 40.3)</b>	<b>107.7 (28.0, 187.3)</b>	-6.9 (-11.4, -2.4)
	2010	-1.8 (-15.5, 11.9)	-7.0 (-11.5, -2.5)	23.0 (-5.6, 51.6)	<b>214.1 (90.1, 338.1)</b>	1.4 (-5.6, 8.4)
	2011	<b>45.5 (28.3, 62.7)</b>	1.4 (-4.3, 7.1)	-38.6 (-74.6, -2.6)	-214.3 (-370.3, -58.3)	1.0 (-7.8, 9.8)
	2012	<b>18.1 (7.2, 29.1)</b>	<b>7.4 (3.8, 11.1)</b>	<b>32.7 (9.8, 55.7)</b>	<b>174.5 (75.1, 274.0)</b>	<b>15.7 (10.0, 21.3)</b>
	2013	<b>43.4 (12.0, 74.7)</b>	10.2 (-0.2, 20.6)	-43.8 (-109.4, 21.8)	-53.2 (-337.7, 231.2)	9.0 (-7.1, 25.0)
Respiratory	2001 (Jul-Dec)	21.5 (-35.5, 78.4)	-5.4 (-16.8, 6.0)	<b>98.4 (54.9, 141.9)</b>	<b>156.8 (14.0, 299.6)</b>	14.3 (-4.3, 32.9)
	2002	<b>86.9 (36.2, 137.6)</b>	<b>28.8 (18.7, 39.0)</b>	<b>44.9 (6.2, 83.7)</b>	<b>289.0 (161.8, 416.1)</b>	<b>46.1 (29.6, 62.7)</b>
	2003	34.2 (-26.1, 94.6)	<b>17.7 (5.6, 29.8)</b>	-1.3 (-47.4, 44.8)	-27.6 (-178.9, 123.7)	18.4 (-1.3, 38.1)
	2004	-16.3 (-127.9, 95.2)	-15.1 (-37.4, 7.3)	42.9 (-42.4, 128.1)	-28.2 (-308.0, 251.7)	-8.7 (-45.1, 27.7)
	2005	64.3 (-34.2, 162.8)	19.5 (-0.3, 39.2)	<b>70.7 (-4.6, 145.9)</b>	-135.3 (-382.3, 111.8)	31.8 (-0.4, 63.9)
	2006	60.4 (-70.3, 193.8)	22.0 (-4.7, 48.8)	101.7 (-0.2, 203.7)	<b>381.1 (46.4, 715.7)</b>	<b>44.1 (0.6, 87.7)</b>
	2007	<b>122.7 (60.4, 185.0)</b>	0.2 (-12.3, 12.7)	-44.7 (-92.3, 2.9)	-168.2 (-324.5, -11.9)	16.1 (-4.2, 36.4)
	2008	<b>94.5 (9.3, 179.7)</b>	<b>52.9 (35.8, 70.0)</b>	<b>138.9 (73.8, 204.0)</b>	<b>432.9 (219.2, 646.7)</b>	<b>77.3 (49.5, 105.1)</b>
	2009	-46.6 (-104.5, 11.3)	-31.0 (-42.7, -19.4)	<b>46.0 (1.8, 90.3)</b>	<b>158.9 (13.6, 304.2)</b>	-21.8 (-40.7, -2.9)
	2010	<b>103.2 (13.0, 193.3)</b>	-8.1 (-26.1, 10.0)	4.8 (-64.0, 73.7)	<b>239.8 (13.7, 466.0)</b>	18.4 (-11.0, 47.9)
	2011	<b>153.4 (40.0, 266.8)</b>	<b>28.1 (5.3, 50.8)</b>	-22.1 (-108.7, 64.6)	-375.1 (-659.6, -90.6)	<b>38.5 (1.5, 75.6)</b>
	2012	51.4 (-20.9, 123.7)	<b>17.7 (3.2, 32.2)</b>	<b>123.3 (68.1, 178.5)</b>	<b>233.0 (51.6, 414.4)</b>	<b>40.9 (17.3, 64.5)</b>
	2013	140.0 (-66.8, 346.8)	30.1 (-11.3, 71.6)	-16.3 (-174.3, 141.7)	381.6 (-137.2, 900.4)	53.8 (-13.8, 121.3)
		<b>Hospitalization rate – attributable to total influenza (95%CI)</b>				
Principal Diagnosis	Year	Age group				
		0-14 years	15-64 years	65-84 years	≥85 years	All-ages
Influenza and Pneumonia	2001 (Jul-Dec)	<b>24.3 (19.5, 29.1)</b>	<b>17.4 (15.8, 19.0)</b>	<b>28.9 (19.1, 38.7)</b>	<b>148.0 (104.6, 191.4)</b>	<b>21.9 (19.5, 24.3)</b>
	2002	<b>54.4 (48.9, 59.9)</b>	<b>15.1 (13.3, 17.0)</b>	<b>75.7 (64.4, 87.0)</b>	<b>386.5 (336.4, 436.6)</b>	<b>35.1 (32.3, 37.9)</b>
	2003	<b>71.4 (67.4, 75.5)</b>	<b>22.2 (20.9, 23.6)</b>	<b>117.5 (109.1, 125.9)</b>	<b>370.7 (333.6, 407.9)</b>	<b>47.8 (45.8, 49.9)</b>
	2004	<b>43.5 (38.0, 49.0)</b>	<b>19.3 (17.5, 21.1)</b>	<b>117.8 (106.5, 129.2)</b>	<b>267.1 (216.9, 317.4)</b>	<b>39.0 (36.2, 41.8)</b>
	2005	<b>21.0 (15.0, 26.9)</b>	<b>23.8 (21.8, 25.7)</b>	<b>70.3 (58.1, 82.6)</b>	<b>374.5 (320.5, 428.5)</b>	<b>33.8 (30.8, 36.8)</b>
	2006	<b>38.3 (32.7, 44.0)</b>	<b>15.7 (13.8, 17.5)</b>	<b>39.7 (28.1, 51.4)</b>	<b>165.7 (114.2, 217.2)</b>	<b>25.2 (22.3, 28.1)</b>

	2007	<b>39.7 (35.5, 44.0)</b>	<b>16.3 (14.9, 17.7)</b>	<b>46.0 (37.2, 54.8)</b>	<b>215.9 (177.0, 254.9)</b>	<b>27.5 (25.4, 29.7)</b>
	2008	<b>34.2 (29.3, 39.2)</b>	<b>18.4 (16.7, 20.0)</b>	<b>71.9 (61.8, 82.0)</b>	<b>185.2 (140.5, 229.9)</b>	<b>30.4 (27.9, 32.9)</b>
	2009	<b>41.4 (37.3, 45.5)</b>	<b>36.2 (34.8, 37.6)</b>	<b>37.5 (29.0, 46.1)</b>	<b>125.5 (87.8, 163.2)</b>	<b>38.9 (36.8, 41.0)</b>
	2010	<b>27.9 (22.6, 33.3)</b>	<b>18.2 (16.4, 20.0)</b>	<b>26.6 (15.6, 37.6)</b>	<b>62.5 (13.9, 111.1)</b>	<b>21.8 (19.1, 24.5)</b>
	2011	<b>21.8 (15.5, 28.2)</b>	<b>13.1 (11.0, 15.2)</b>	7.5 (-5.6, 20.6)	-96.6 (-154.4, -38.8)	<b>12.1 (8.9, 15.3)</b>
	2012	<b>30.3 (25.0, 35.6)</b>	<b>26.4 (24.6, 28.1)</b>	<b>116.5 (105.5, 127.5)</b>	<b>597.8 (549.2, 646.4)</b>	<b>48.8 (46.1, 51.5)</b>
	2013	<b>38.3 (31.7, 44.9)</b>	<b>28.2 (26.0, 30.4)</b>	<b>52.3 (38.8, 65.8)</b>	<b>161.6 (101.8, 221.4)</b>	<b>35.6 (32.3, 39.0)</b>
Respiratory	2001 (Jul-Dec)	<b>48.2 (17.2, 79.3)</b>	<b>41.7 (35.4, 48.0)</b>	<b>97.8 (74.2, 121.3)</b>	<b>270.9 (193.0, 348.9)</b>	<b>52.4 (42.3, 62.5)</b>
	2002	<b>169.3 (133.4, 205.1)</b>	<b>32.5 (25.3, 39.7)</b>	<b>269.9 (242.7, 297.2)</b>	<b>825.3 (735.3, 915.2)</b>	<b>98.0 (86.3, 109.7)</b>
	2003	<b>139.1 (112.6, 165.7)</b>	<b>57.1 (51.8, 62.5)</b>	<b>369.6 (349.4, 389.8)</b>	<b>888.7 (822.0, 955.4)</b>	<b>120.7 (112.1, 129.4)</b>
	2004	<b>73.7 (37.8, 109.7)</b>	<b>45.1 (37.8, 52.3)</b>	<b>300.3 (273.0, 327.5)</b>	<b>475.3 (385.1, 565.5)</b>	<b>86.3 (74.6, 98.0)</b>
	2005	29.6 (-9.1, 68.2)	<b>53.8 (46.0, 61.6)</b>	<b>284.8 (255.5, 314.2)</b>	<b>783.3 (686.3, 880.3)</b>	<b>86.3 (73.7, 98.9)</b>
	2006	<b>100.7 (63.9, 137.6)</b>	<b>42.9 (35.5, 50.3)</b>	<b>207.9 (179.9, 235.9)</b>	<b>484.7 (392.2, 577.2)</b>	<b>80.1 (68.1, 92.1)</b>
	2007	<b>108.9 (81.0, 136.7)</b>	<b>37.9 (32.3, 43.5)</b>	<b>134.1 (112.9, 155.2)</b>	<b>351.1 (281.2, 421.1)</b>	<b>67.9 (58.8, 76.9)</b>
	2008	<b>65.1 (33.1, 97.1)</b>	<b>53.3 (46.8, 59.7)</b>	<b>240.1 (215.8, 264.4)</b>	<b>546.1 (465.8, 626.4)</b>	<b>85.4 (75.0, 95.8)</b>
	2009	14.1 (-12.9, 41.1)	<b>57.2 (51.7, 62.6)</b>	<b>80.5 (60.0, 101.0)</b>	<b>323.9 (256.2, 391.6)</b>	<b>56.1 (47.4, 64.9)</b>
	2010	<b>40.5 (5.8, 75.3)</b>	<b>28.4 (21.4, 35.4)</b>	19.2 (-7.1, 45.6)	31.5 (-55.8, 118.7)	<b>29.7 (18.3, 41.0)</b>
	2011	<b>78.6 (37.2, 120.0)</b>	<b>17.7 (9.4, 26.0)</b>	<b>64.9 (33.5, 96.3)</b>	-31.2 (-135.1, 72.6)	<b>34.1 (20.6, 47.5)</b>
	2012	-22.2 (-57.0, 12.5)	<b>52.4 (45.4, 59.4)</b>	<b>369.7 (343.3, 396.1)</b>	<b>1120.0 (1032.7, 1207.2)</b>	<b>97.2 (85.9, 108.5)</b>
	2013	<b>91.3 (48.5, 134.1)</b>	<b>58.9 (50.2, 67.5)</b>	<b>168.1 (135.6, 200.6)</b>	<b>377.8 (270.3, 485.2)</b>	<b>84.6 (70.7, 98.6)</b>

<sup>a</sup> Rate per 100,000 population; Positive statistically significant estimates are shown in bold and negative statistically significant estimates are presented by italics.