

**Table I. Comparative Assessment Table: The 2009 H1N1 Outbreak in Five Southern Hemisphere Countries** (N/A: Information not available)

	Argentina	Australia	Chile	New Zealand	Uruguay	U.S.
<b>H1N1 OUTBREAK TIMELINES AND GEOGRAPHIC DISTRIBUTION</b>						
<b>Regular Influenza Season</b>	May to September (Seasonal flu kills an estimated 3,500 to 4,000 people a year).	June to October	May to September	May to October (seasonal flu kills approximately 400 persons a year)	May to September	October to May (seasonal flu kills an estimated 36,000 people a year)
<b>First Confirmed Case of H1N1</b>	May 16	May 7	May 17	April 28	May 27	April 17
<b>Geographic Distribution</b>	Country-wide	Country-wide	Country-wide	Country-wide	Country-wide	Country-wide
<b>H1N1 Influenza Peak</b>	Late June in Buenos Aires, early July in the rest of the country.	Early July	Late May to early July	Early to Mid June	Early July	Mid June
<b>Disease Trend (ILI reported cases, hospital occupancy, etc.)</b>	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing overall but small increases in some locations.
<b>VIROLOGY</b>						
<b>Sequence similarity to US isolates</b>	Yes (5 isolates sequenced)	N/A	Yes (11 isolates sequenced)	Yes (2 isolates sequenced)	Yes (1 isolate sequenced)	Not applicable
<b>Neuraminidase Inhibitors Sensitivity</b>	Yes	Yes	Yes	Yes	Yes	Yes (99.5% of isolates tested)
<b>Percentage of 2009 H1N1 Virus positive specimens</b>	Percentage of Respiratory Viruses: H1N1 and non-	Percentage of Influenza A Viruses H1N1: 96% of	Percentage of Respiratory Viruses: Influenza A non-	Percentage of Influenza Viruses: 82% in July	Percentage of Influenza Viruses: 99% in July	Percentage of Influenza viruses: 98% on August 9-15

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	typeable influenza A: 92.43 % of the cases in persons older than 5 years. In children under 5 years, the percentage is 23,47% with 70.35% RSV.	influenza isolates in Victoria region and 82% in New South Wales region.	typeable and H1N1: 48.4% (19% non-typeable Influenza A, 29% H1N1, 0.5% seasonal influenza (H3 or H1)). Percentages vary per age group. During July, H1N1 constituted nearly 64% of all circulating viruses. In the week of August 15, the percentage decreased to 11%.			
<b>EPIDEMIOLOGY</b>						
<b>Country Population</b>	40,913,584	21,180,632	16,601,707	4,213,418	3,494,382	307,261,236
<b>Number of Laboratory Confirmed Cases</b>	7,173	33,228	12,104	3,086	343	35,829
<b>Total Reported ILI cases</b>	811,940 (May-August)	N/A	353,525	N/A	N/A	N/A
<b>Total Hospitalizations</b>	6,346 (severe acute respiratory infections)	4,122 (H1N1)	1,325 (severe acute respiratory infections)	915 (H1N1)	N/A	7,983 (H1N1)
<b>Hospitalizations/ 100,000 population</b>	15.66	19.38	7.8	21.71	N/A	2.6

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<b>Total Deaths</b>	439	132	128	16	34	522
<b>Affected Population Groups</b>	Among hospitalized cases, there are no differences among sexes except for the age group 20-29, where women were affected 127% more than men. The most affected group is children under 5 years (39.09 cases/100,000 persons)	Among hospitalized cases, the most affected group is children under 5 years; 80% ICU admission in age group 30-59; 4% of cases are pregnant women; 35% of hospitalized pregnant women within the age group 25-35; 15-20% of hospitalized persons with H1N1 admitted to ICU.	Among hospitalized cases, the median age was 43 years (range 11 days-94 years); Women represented 51% of the cases; Higher rates in children under 1 year of age (62.6/100,000) and in the age group 1-4 (15.9/100,000); 48% of the severe cases had co-morbidities.  Among ambulatory cases, the most affected age groups are between 5-14 years followed by those younger than 5 and by 15-59 years.	Among hospitalized cases, 1/3 of cases admitted to ICU; Majority of cases with co-morbidities; Rates 3 times higher in indigenous people.	The majority of H1N1 cases is in the age group 15-44; 76% of cases under 20 years of age; 48% of confirmed cases with co-morbidities.	Among hospitalized cases, the rate is higher among children 0-4 years (6.5/100,000 persons) followed by children 5-24 years of age (3.0/100,000) and adults age 65 and older (2.9/100,000).  Among ambulatory cases, the most affected groups are children 0- 4 years of age. At the peak of H1N1 activity in the US, the % was highest among person 5-24 years of age.

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	Among fatal cases, death occurred most frequently in the 50-59 age group; 47% of fatal cases had co-morbidities	Among fatal cases, the median Age: 51 (3-86 range) 73% deaths in people younger than 65	Among fatal cases, the median age was 49 years (4 mo-89 y) 60.1% of fatal cases had co-morbidities; 52.3% deaths in men			Among fatal cases, the largest number has occurred among person age 25-49 years. The highest rate is among persons age 50-64 (0.26/100,000), followed by persons 25-49 years of age (0.21/100,000).
<b>CONTROL MEASURES</b>						
<b>Antiviral Treatment and Prophylaxis</b>	In July, oseltamivir was given to persons with ILI. Currently, oseltamivir is for persons with high risk conditions and those hospitalized.	7,500 doses of pediatric oseltamivir were released in the Victoria and Western Australia states, and 10,000 packets to Victoria. Oseltamivir was used for persons with moderate to severe illness, persons with conditions conferring a higher risk for severe illness, and members of special populations.	647,294 treatment courses of oseltamivir were released from the national strategic reserve for patients with ILI.	Enough oseltamivir for 30% of population held by government. 1.4 million doses of oseltamivir was released to regional health authorities for treatment of persons with ILI and their contacts. Additional 125,000 doses of zanamivir purchased	Strategic reserve of antivirals for use of cases of ILI, contacts of cases with co-morbidities, and for pregnant women. Oseltamivir available in all health care centers	Distribution of 15M treatments of oseltamivir to States for high-risk populations and those with ILI.
<b>Community Mitigation Measures</b>	School closures in July. Dissemination of recommendations to	In late May, five schools were closed in Victoria and South	Schools were not closed before the scheduled winter	Some schools closed for brief periods.	Government did not institute national closures or extend	Some schools with cases closed for brief periods.

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	<p>avoid transmission before school re-opening after winter break.</p> <p>Dissemination of guidance on personal hygiene.</p> <p>Work furloughs for pregnant women and others in at-risk groups in July and August.</p> <p>Flight cancellations from Mexico in May.</p> <p>Restriction of swine trade in some provinces in July</p> <p>Social Distancing Measures (e.g. theater closures) recommended in July</p>	<p>Australia following confirmation of cases among students. Schools re-opened on June 17</p> <p>Initially, thermal scanners were deployed and activated at eight international airports. On June 17, initial border screening measures adjusted and focused on managing sick passengers identified at international borders and providing information to healthy travelers.</p>	<p>break, July 13-24. At onset of the outbreak, the government recommended against non-essential travel to the U.S. or Mexico. The government also required that passengers on cruise ships stopping in Chile and flights to Chile from countries other than the U.S. and Mexico complete health questionnaires and distributed informational pamphlets at land border crossings.</p>	<p>Public health messages emphasized home isolation of less severe cases.</p>	<p>winter school break. Government took tempered approach and emphasized prevention via personal hygiene.</p> <p>No travel restrictions or border screening measures implemented.</p>	<p>Dissemination of guidance on personal hygiene, use of antivirals, facemasks, and respirators.</p> <p>No travel restrictions or border screening measures implemented</p>
<b>IMPACT OF THE H1N1 OUTBREAK ON THE HEALTH CARE SYSTEM</b>						
<b>Impact on the Healthcare System</b>	<p>Anecdotal reports of hospital diversions and medication shortages during the peak in late June in Buenos Aires.</p>	<p>Some hospitals in Victoria, New South Wales and Queensland reported inpatient wards and ICUs were</p>	<p>Occasional patient wait times of up to 7 hours</p> <p>An additional \$4M to public facilities for</p>	<p>Surge in cases had greater impact on resources in ICU than in EDs.</p> <p>At H1N1 peak, half of</p>	<p>Occupation of hospital beds by patients with severe acute respiratory illness has not exceeded 80%.</p>	<p>Total influenza hospitalization rates for adults and children remain low and are well below the seasonal winter-time</p>

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	<p>On July 9, the Ministry of Health announced the deployment of 28 mobile hospital units in Buenos Aires and hired 600 health care workers to run these units. As many as 40% of health-care workers in some regions stayed away from work during the peak of the disease, due in part to a national furlough of government employees at higher risk of infections or severe disease (e.g., pregnant women, parents with young children and persons with co-morbidities).</p>	<p>intermittently full. Additional respirators and extracorporeal membrane oxygenation machines ordered.</p>	<p>personnel and equipment; Presidential decree to give Ministry of Health additional authority to redirect medical personnel, control antiviral prescriptions, cancel public events, suspend elective procedures and coordinate health authorities.</p>	<p>ICU beds occupied. Calls to Healthline reached 2000 per day and remain 20% above normal levels.</p>	<p>Use of respirators did not exceed 60% of all available equipment. Greatest strain on network of laboratories which did not have capacity to keep up with testing despite donations of equipment from CDC.</p>	<p>average of the last four years. Supplemental funding through the Hospital Preparedness Program to support additional public health and medical care planning.</p>
<b>SOCIAL/ECONOMIC IMPACT OF THE H1N1 OUTBREAK AND/OR CONTROL MEASURES</b>						
<b>Workplace Absenteeism</b>	40% of healthcare workers in some areas	Higher than 2007 and 2008 influenza seasons; Rates currently declining	General teacher's strike closed public schools for several weeks. Some schools reported significant rates of absenteeism due to ILI .	Hospital staff absenteeism stressed hospitals temporarily during the peak of the disease	School absenteeism higher in July during the peak of disease, normal levels in August	There are no data to suggest increased absenteeism in the workplace.