

## **Fact Sheet: Pandemic (H1N1) 2009 Influenza (often referred to as Swine Influenza) and Diabetes**

### **1) What is pandemic (H1N1) 2009 influenza and who is at risk of severe illness?**

- Influenza is a serious, often debilitating illness of which the affects are felt throughout the whole body. Symptoms include fever, fatigue, headache, muscle ache and pains.<sup>1</sup>
- The symptoms of this new H1N1 influenza are generally the same as the symptoms felt for seasonal influenza, however, some people may experience additional symptoms including diarrhoea and vomiting.<sup>2</sup> These symptoms can range from mild to severe, in Australia most case of swine influenza have been mild.<sup>2</sup>
- Both our usual seasonal influenza viruses and the pandemic H1N1 influenza can exacerbate diabetes and other pre existing medical conditions. People that are more vulnerable to severe illness include those with<sup>2</sup>:
  - Diabetes (type 1 an type 2)
  - Heart conditions
  - Kidney problems
  - Impaired immunity
  - People that are very overweight
  - Pregnant women
  - Respiratory conditions including asthma and Chronic Obstructive Pulmonary Disease (COPD)

### **2) Why does having Diabetes make someone more vulnerable to severe influenza?**

- Influenza can interfere with blood glucose management, putting those with diabetes at increased risk of high or low blood sugar, and those with type 1 diabetes, in particular, are at increased risk of developing ketoacidosis.<sup>3</sup>
- Some people with diabetes may have impaired immune function, making them more vulnerable to severe cases of influenza.<sup>4</sup>
- Influenza can also stress the body so much that an underlying illness may worsen.<sup>2</sup>

### **3) How contagious is the pandemic (H1N1) 2009 influenza?**

- Influenza is highly contagious and can be spread from an infected individual for up to a day before symptoms appear and for five days afterwards.<sup>5</sup>
- After someone coughs, sneezes or touches a surface with contaminated hands the influenza virus can survive for:
  - Up to an hour in the air in enclosed environments<sup>6</sup>
  - More than eight hours on hard surfaces such as stainless steel and plastic<sup>7</sup>
  - Up to five minutes on hands after transfer from other surfaces<sup>7</sup>

### **4) How can you reduce your risk of being infected with pandemic (H1N1) 2009 influenza?**

- Simple personal hygiene steps such as washing or disinfecting hands and; staying away from people who are ill, or places where you might encounter people who are infected, will significantly reduce the chances of influenza infection.<sup>2</sup>
- Vaccination is the single most effective way of protecting yourself against influenza infection and currently a vaccine is being developed to protect against this new influenza strain. This vaccine will be available later in 2009 and will be made available by the Government to people most at risk of spreading the virus and those most at risk of complications.<sup>8</sup>
- Influenza vaccination is safe and effective in adults and children with diabetes. The Australian Immunisation Handbook strongly recommends Australians aged  $\geq 6$  months with conditions predisposing them to severe influenza receive annual vaccination.<sup>5</sup>

- Influenza vaccination is also important for close contacts of people with diabetes to help prevent the spread of influenza infection to these vulnerable individuals. This includes household members and health care workers.

#### 5) What can you do if you fall ill with pandemic (H1N1) 2009 influenza?

- It is important that you see your GP immediately if you believe that you are suffering influenza and wish to reduce the severity and duration of your illness as the available treatments should be instituted within the first 48 hours of symptom onset, the earlier the better.
- A nose or throat swab may be taken to diagnose infection. However, testing is no longer considered necessary for most people. If you need to see a doctor, they will determine whether testing is necessary.<sup>2</sup>
- Voluntary home isolation is recommended for anyone who is infected with H1N1 swine influenza and it is always a good idea to stay at home and rest if you have influenza-like symptoms.<sup>2</sup>

#### 6) How is pandemic (H1N1) 2009 influenza treated?

- There is now a focus on early treatment for people infected with the virus and who are identified as "vulnerable" to severe outcomes, as well as those with moderate or severe illness.<sup>2</sup>
- Antiviral medications Tamiflu (Oseltamivir) and Relenza (Zanamivir) have been shown to be effective in the treatment of this strain of influenza.<sup>9</sup> These medications can limit the effect of influenza if they are taken early after onset of symptoms (within the first two days of the illness), and assist in recovery. Antiviral treatments are available only on prescription.

#### References

1. National Institute of Clinical Studies. Flu Facts. Last viewed: July 2009. Available at: <http://www.fightflu.gov.au/asp/index.asp?sid=2118&page=influenza>
2. Australian Government Department of Health and Ageing. People at risk. Last viewed July 2009. Available at: <http://www.healthemergency.gov.au/internet/healthemergency/publishing.nsf/Content/people-at-risk>
3. American Diabetes Association. Diabetes Myths. Last viewed: July 2009. Available at: <http://www.diabetes.org/diabetes-myths.jsp>
4. Centers for Disease Control and Prevention. Diabetes Public Health Resource News and Information. Last viewed July 2009. Available at: [http://www.cdc.gov/diabetes/news/docs/swine\\_flu.htm](http://www.cdc.gov/diabetes/news/docs/swine_flu.htm)
5. National Health and Medical Research Council. *The Australian Immunisation Handbook 9<sup>th</sup> Edition 2008*. Available at: <http://immunise.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook-home>
6. Weber T.P., Stilianakis N.I. Inactivation of influenza A viruses in the environment and modes of transmission: A critical review. *Journal of Infection* (2008) 57, 361-373.
7. Bean B, Moore BM, Sterner B *et al*. Survival of influenza virus on environmental surfaces. *J Infect Dis* July 1982; **146**(1):47-51
8. Australian Government Department of Health and Ageing. Human Swine flu vaccine. Last viewed July 2009. Available at: <http://www.healthemergency.gov.au/internet/healthemergency/publishing.nsf/Content/news-039>
9. Australian Government Department of Health and Ageing. Antiviral Medication Use. Last viewed July 2009. Available at: <http://www.healthemergency.gov.au/internet/healthemergency/publishing.nsf/Content/healthprof#antiviral>

Last Updated: July 2009