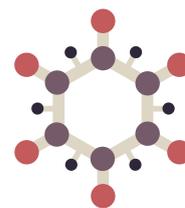
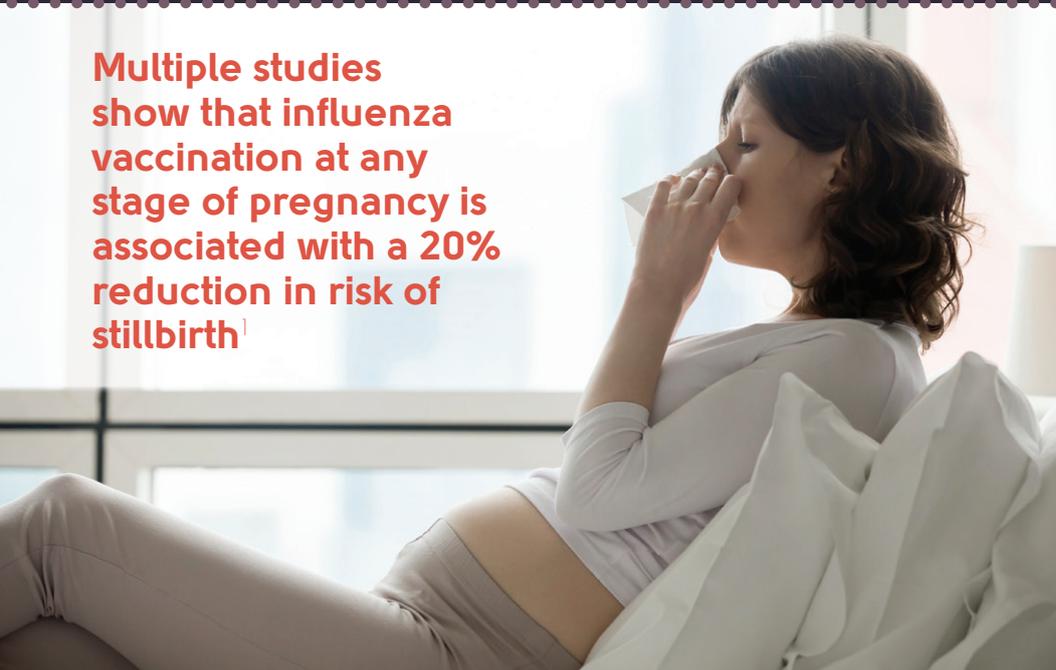


# Influenza and pregnancy

a guide for doctors and midwives

**Multiple studies show that influenza vaccination at any stage of pregnancy is associated with a 20% reduction in risk of stillbirth<sup>1</sup>**



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## Who should be vaccinated?<sup>3</sup>

## RISKS OF INFLUENZA DURING PREGNANCY

Influenza is a potentially fatal disease.<sup>2</sup> In an average year in Australia, thousands of people die from and tens of thousands of people are hospitalised due to influenza and its complications.<sup>3</sup> Much of the burden of mortality and morbidity is borne by the young<sup>4</sup> and old.<sup>5</sup> Pregnant women too bear a disproportionate burden from influenza infection: in 2009, 5% of influenza related deaths were in pregnant women despite them only representing 1% of the population.<sup>6</sup>

As the immune system is naturally suppressed during pregnancy, this leads to increased chance of contracting the flu. Due to this, pregnant women are at higher risk of severe complications associated with the virus. With respect to pregnancy complications, influenza infection increases the risk of stillbirth, premature birth and suboptimal fetal growth. Importantly, maternal flu vaccination protects against these three complications.<sup>1,7</sup>

The vaccine is important for pregnant women or women trying to get pregnant, especially if they have other underlying medical conditions, such as heart or lung disease (including asthma), diabetes, neurological, or certain autoimmune diseases.<sup>8</sup>

The flu vaccine is safe for pregnant women.<sup>9,10</sup> Multiple studies confirm no increase in fetal loss, preterm birth or growth restriction.<sup>1</sup> In fact, maternal vaccination is associated with lower rates of these complications which can affect the unborn child.<sup>7</sup> Getting the shot during pregnancy reduced the risk of the mother getting the flu by about 70%. Among pregnant women with confirmed influenza, the risk of fetal death was nearly doubled. In all, there were 16 fetal deaths among the 2,278 women who were diagnosed with influenza during pregnancy.<sup>11</sup>

Vaccinating against flu during pregnancy also provides protection for the baby, and has proven to significantly reduce hospitalisations.<sup>12</sup> This is due to the protective antibodies transferred to the baby, which remain in the newborn's blood during the first vulnerable months of life.

Under the National Immunisation Program (NIP), pregnant women are eligible for free flu vaccine.

Annual influenza vaccination is recommended for any person (6 months+) who wishes to reduce the risk of becoming ill with influenza.\*

People at increased risk of influenza complications:

- Older adults (65+)
- Indigenous Australians (15+)
- Those (over 6 months old) with underlying medical conditions such as
  - **Pregnant women**
  - Heart conditions, severe asthma, lung conditions, diabetes (type 1 and 2), chronic neurological disease, renal and metabolic disease, and impaired immunity
  - Residents of nursing homes and other long-term care facilities
  - People who may transmit flu to high-risk individuals.

\* This group may qualify for free vaccine under the Australian Government's National Immunisation Program

# “Vaccinating pregnant women against influenza gives a 3 for 1 benefit:

- protects the woman during pregnancy and in the early months of motherhood
- protects the young infant by transplacental antibodies
- protects the young infant by antibodies in breast milk.”

Elizabeth McCarthy, Senior Lecturer, Department of Obstetrics and Gynaecology, University of Melbourne, Perinatal Centre, Mercy Hospital for Women



## INFLUENZA VACCINATION AND PREGNANCY

The World Health Organization

(WHO) Strategic Advisory Group of Experts (SAGE) has identified pregnant women as the most important risk group for seasonal influenza vaccination.<sup>13</sup> Antibodies in a pregnant woman’s blood are actively transported to the fetus, especially in late pregnancy. Scheduling vaccines during pregnancy is not new, mimicking ‘mother’s gift of immunity to her offspring’.<sup>14</sup> Administration of killed influenza virus vaccines during pregnancy was common for much of the last 50 years in the USA, and then became widely used again around the world during and after the 2009-10 H1N1 pandemic.<sup>10, 15, 16</sup>

For pregnant women, influenza vaccination protects against well-recognised morbidity and mortality of influenza infection.<sup>10</sup>

For babies aged 6 months or younger, maternal influenza vaccination during pregnancy is the most effective way to protect young babies at an age when they are most susceptible to disease but least responsive to vaccines.<sup>10</sup> Inactivated influenza vaccination during pregnancy has been consistently shown to be safe for the unborn baby.<sup>11</sup>



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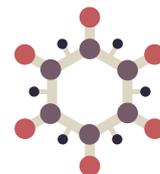
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