

## Editorial

# The Case for Flu Vaccination

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Influenza or flu vaccine encompasses the seasonal vaccination that protects against infection by the influenza viruses.<sup>1</sup> It's generally available in two forms; the inactive form administered as shots or intramuscular injections and the weakened live viral forms sprayed intranasally.

The flu vaccination is generally safe and listed among the WHO list of Essential Medicines.<sup>2</sup> It is currently the best way to protect the populace from the flu, thereby preventing its spread and both the United States Center for Disease Control and Prevention (CDC) and the World Health Organization (WHO) recommend yearly vaccination for nearly all people beyond six months of age, especially if in high risk groups such as pregnant, healthcare workers, elderly, those with other healthcare conditions and children between six months and five years of age.<sup>3,4</sup>

The influenza vaccination was initiated in the 1930's but achieved large scale availability in the United States in 1945<sup>5</sup> and even though their effectiveness varies from year to year, it has been established by the CDC that they do reduce the incidence of influenza related sickness, medical visits, hospitalizations and deaths.<sup>6</sup>

On vaccination, it takes about two weeks to form protective antibodies<sup>7</sup> and as of 2015, each influenza vaccine dose cost less than \$25 in the United States and very much less in most developing nations.<sup>8</sup>

The flu vaccination has been rarely linked to the development of Guillain-Barré syndrome<sup>9</sup> but established side effects ranging from runny nose, sore throat, muscle pain and fever to rare allergic reaction are relatively mild when compared to the severe effects of the annual influenza epidemic such as hospitalizations and death.<sup>1,7</sup>

The live attenuated version works by introducing an infection in the nasal passages while the inactivated form is based on an immune response to the antigens present on the inactivated

virus and only the inactive version should be administered to pregnant women to assist in inducing protection of both mother and child from the effects of an influenza infection thereby increasing her chances of a successful full term pregnancy.<sup>10,11</sup>

Vaccine administration should be avoided in those with severe allergies to prior versions of the influenza vaccine and also since eggs are typically used in the processing of the flu vaccines, caution should be taken in those with allergy to eggs and history of Guillain-Barre syndrome.<sup>12,13</sup>

Egg allergy cases are now being circumvented by growing the vaccine in insect cells rather than eggs<sup>14</sup> and the Global Advisory Committee on Vaccine Safety of the World Health Organization has found no evidence to be fearful of toxicity from the Mercury based preservative, thimerosal.<sup>15</sup> Nevertheless, thimerosal-free versions of flu vaccines are available in developed countries.

The need for vaccination against influenza in high-risk groups cannot be overemphasized and it should be routinely offered seasonally as the risk-benefit ratio is definitely in support of vaccination.

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