
Executive summary

Health Council of the Netherlands. Fighting the flu. The Hague: Health Council of the Netherlands, 2014; publication no. 2014/16

There is still considerable discussion both nationally and internationally about the target groups for annual vaccination against seasonal influenza. In our country, the focus lies primarily on healthy people over the age of 60 – is it right to vaccinate this group against influenza? – and healthy pregnant women – should they also receive vaccinations in the future? Following a request by the Minister of Health, Welfare and Sport, a committee from the Health Council of the Netherlands examined the current state of knowledge regarding this topic. There are three important evaluation criteria in this context. Firstly, “disease burden”: the infectious disease results in a significant individual disease burden. Secondly, “effectiveness”: vaccination can significantly reduce this disease burden. And thirdly, “efficiency”: the ratio between costs and health gain is relatively favourable.

Healthy people aged 60 years and over

As far as healthy people aged 60 years and over are concerned, the committee concluded that influenza is associated with a significant disease burden, which increases with age. The total influenza-attributable mortality fluctuates from several hundred to one or two thousand, depending on the virulence of the circulating influenza virus. It is estimated that hospital admissions for influenza are several times higher and also fluctuate annually. However, it is not known

exactly how effectively influenza vaccination protects this group of elderly people against severe effects such as hospital admission and mortality. There are definitely indications to support this, but the evidential value of the available data is limited. It is also clear that the effectiveness can fluctuate strongly per season, depending on the “match” between the circulating strain and the viral strains used for the vaccine. There are also seasons in which hardly any influenza virus is circulating, but it is not possible to predict when this will happen. The committee is of the opinion that the average cost-effectiveness of the vaccination programme has most probably been less favourable through the years than originally assumed, but still appears to be within (inter)nationally set or accepted limits for efficiency. The committee has also included two other considerations in the decision-making process. There has been a decreasing trend for some time now in the incidence of influenza-like illness and in the incidence of officially registered mortality caused by influenza. This decrease can be attributed in part to the annual influenza vaccination, but it is not possible to say exactly how big this role is. Furthermore, we expect more effective vaccines to become available in the near future. The developments in this field are discussed briefly in the advice. Therefore, the committee deems the continuation of the current vaccination programme for people aged 60 years and over to be justified.

Healthy pregnant women

There does not appear to be a significant disease burden caused by influenza in healthy pregnant women. The same does not apply to children under the age of six months, but the committee is of the opinion that there are currently not enough indications that vaccination of the mother offers effective and efficient protection against complications caused by influenza. Therefore, the committee sees no indication for the vaccination of all pregnant women.

Recommendations

The committee deems it important and also deems it possible to gain an improved insight into the effectiveness and efficiency of the vaccination programme for healthy elderly people. The committee is of the opinion that the so-called test-negative design, which is less sensitive to confounding than other forms of observational research, offers a good opportunity for improved determination of the clinical utility. The committee also recommends that a new cost-effectiveness analysis should be performed, based on dynamic models over several years that take into consideration the latest data and the repetitive nature

of the vaccination programme. The committee has outlined which variables, parameter values and uncertainties play a role here.

