Effects of varicella vaccination on herpes zoster incidence.

Abstract:
The effects of a general varicella vaccination programme on the incidence of herpes zoster are of major public health importance. This review focuses on two key aspects, namely the relationship between wild-type virus spread and the incidence of herpes zoster, as obtained from recent surveys, surveillance and observational studies, and the results from mathematical population models. Although knowledge is limited, close contact with varicella cases seems to have a protective effect. Thus, an increase in zoster incidence after varicella immunisation is possible, but the extent is unknown because of the influence of other factors independent of immunisation. Currently, vaccination effects estimated from mathematical modelling depend strongly on pre-specified assumptions. In order to obtain more precise predictions, the results of ongoing monitoring and clinical studies are awaited and further studies are suggested. Vaccination recommendations can be adapted at any time to take account of further findings in this area.