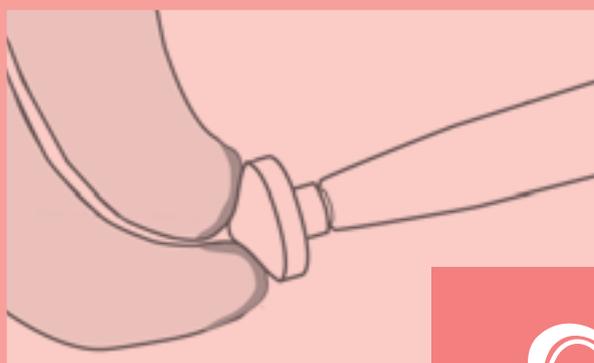


WHO guidelines

# Use of cryotherapy for cervical intraepithelial neoplasia





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## Declarations of interest

All experts who participated in the development of *World Health Organization guidelines: use of cryotherapy for cervical intraepithelial neoplasia*, were required to complete the WHO Declaration of Interests form. Out of all the experts who participated in this work, three experts declared an interest in the subject related to cervical cancer prevention, as follows:

Dr Lynette Denny: from 2006 to 2010, she has spoken on HPV vaccination at various speaker's fora organized by the companies MSD and GSK. The total honorarium received by Dr Denny from both companies combined was approximately US\$ 3000 per year."

Dr Swee Chong Queck: over the past four years, he has participated in medical advisory boards and speakers' bureaux relating to cervical cancer prevention strategies, HPV vaccine efficacy studies and clinical relevance of HPV vaccination for the prevention of cervical cancer and other HPV related diseases. The total income received by Dr Queck from both companies combined was approximately 5000 Singapore dollars per year over the past four years.

Dr Vivien Tsu: her employer PATH, an international nonprofit organization operating in the field of health, has received large-scale donations of HPV vaccines and test kits, as well as equipment, for use in demonstration projects aimed at promoting public health, including in particular in low-resource countries.

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## Executive Summary

In 2008, cervical cancer was responsible for 275 000 deaths, of which about 88% occurred in low- and middle-income countries. In 2009, the World Health Organization (WHO) committed to updating the recommendations on the use of cryotherapy for cervical intraepithelial neoplasia (CIN), adhering to the WHO revision process of guideline development. This document summarizes the new evidence-based WHO recommendations about the use of cryotherapy in women with histologically confirmed CIN for low-, middle- and high-income countries.

The methods used to develop these guidelines follow the *WHO handbook for guidelines development*. An expert panel was established that included clinicians who provide cryotherapy services, researchers in cervical cancer prevention and treatment, programme directors and methodologists. An independent group of scientists at a WHO collaborating center conducted systematic reviews and produced evidence summaries following the GRADE (Grading of Recommendations, Assessment, Development and Evaluation) approach.

GRADE evidence profiles were created for 16 key questions about the effects of cryotherapy in the presence of histologically confirmed CIN compared to no treatment and to loop electrosurgical excision procedure (LEEP), as well as the use of different techniques of cryotherapy. Conflict of interests were managed according to WHO rules.

The systematic reviews had very few randomized controlled trials or controlled observational studies, and therefore most of the recommendations are based on pooled results across observational studies in women receiving cryotherapy. Very few studies assessed outcomes that the expert panel had identified as critical to decision-making, including fertility and obstetrics outcomes, maternal morbidity, acceptability of the procedure to women or their health-care providers, referral rates for complications, and HIV acquisition and transmission. Thus, most of the resulting 14 recommendations are based on studies that included outcomes for recurrence rates of CIN, major and minor adverse events, and cervical cancer incidence and mortality rates.

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