Summary
Geographical widespread data on human papillomavirus (HPV) type-distribution, in addition to that of cervical cancer incidence, are essential for estimating the impact of type-specific HPV vaccines on cervical cancer and cervical screening programmes.

Key words: human papillomavirus, epidemiology, cervical cancer

IARC has coordinated population-based surveys of HPV prevalence in more than 20 regions across Africa, Asia, South America and Europe, using a standardised HPV testing protocol (GP5+/6+ PCR-based EIA at Vrije University, Amsterdam). In a pooled analysis of 15,613 women aged 15–74 years without cytological abnormalities, the most common types were HPV-16, -42, -58, -31, -18, -56, -81, -35, -33, -45 and -52, with evidence that the relative importance of HPV types varied by region (1). Most markedly, HPV-positive women in sub-Saharan Africa were significantly less likely to be infected with HPV-16 and more likely to be infected with other high-risk (e.g. HPV-35) and low-risk HPV types.

However, meta-analyses of HPV type-distribution among cervical precancers and cancers have shown that the relative importance of HPV-16 and -18 increases, and geographical differences decrease, with increasing severity of cervical lesions. HPV-16/18 is estimated to account for 16–32% of low-grade squamous intraepithelial lesion (LSIL), 41–67% of high-grade squamous intraepithelial lesion (HSIL), but 70% of all cervical cancers worldwide (2). The estimated fraction of cervical cancer caused by HPV-16 and 18 is slightly only higher in more developed (72–77%) than in less developed (65–72%) regions. After HPV-16/18, the six most common HPV types are the same in all world regions, namely 31, 33, 35, 45, 52 and 58; accounting for an additional 20% of cervical cancers (3).

REFERENCES