

# In this month's *Bulletin*

## Algorithm is effective in diagnosing paediatric HIV

(pp. 858–866)

Primary health care workers can effectively identify children with symptomatic HIV infection through the use of an algorithm — a step-by-step protocol for the management of health care problems. Horwood et al. compared the sensitivity of an algorithm currently used by primary health care workers in South Africa with the sensitivity of clinical diagnosis and an HIV test. Of the 690 children assessed, the paediatrician correctly identified 71.1% of cases whereas the algorithm identified 56% of cases. Using odds ratios to identify predictors of HIV infection, Horwood et al. developed an improved HIV algorithm that is 67.2% sensitive — in other words — nearly as effective as the paediatrician in detecting HIV infection.

## Mass livestock vaccination to control brucellosis in Mongolia

(pp. 867–876)

Mass vaccination of cattle in Mongolia to control brucellosis is more cost-effective than current practice. Roth et al. compared the cost and health effects for Mongolia's human population of a planned 10-year whole-herd vaccination campaign with the current method of low-level surveillance and voluntary slaughter of infected animals. They calculated the cost savings associated with three vaccination possibilities by performing an incremental cost-effectiveness analysis. For example, with a 52% reduction of transmission between animals, 49 027 disability-adjusted life years could be averted, representing a net saving of US\$ 18.3 million. The saving increases if private economic gain resulting from improved human health is included.

## Alternative method for assessing trachoma prevalence

(pp. 877–885)

Lot quality assurance sampling (LQAS) — a survey method used in the manufacturing industry — can be used to rapidly assess the prevalence of active trachoma in communities and to classify them according to high and low prevalence. Myatt et al. conclude that LQAS

represents a viable replacement for the currently used trachoma rapid assessment method. They examined all children aged between two and five years to establish prevalence in six communities in Malawi. They then conducted 96 trial surveys in the communities using LQAS sampling plans. All communities with low prevalence ( $\leq 20\%$ ) and high prevalence ( $\geq 40\%$ ) were identified correctly.

## How to use the private sector to improve child health

(pp. 886–895)

International institutions and governments in developing countries have traditionally concentrated on improving child health through the public sector. However, there has been increasing interest in the role of the private sector in improving child health in developing countries. In a review of experiences of private sector utilization, Bustreo et al. discuss the feasibility and benefits of various strategies currently used by governments to engage the private sector. Whilst some individual country experiences of these strategies have been positive, they are difficult to generalize since their costs and benefits have been poorly monitored and evaluated. A more systematic approach is needed to develop programmes aimed at helping governments engage the private sector more effectively. This should begin with an evaluation of the full range of private sector potential.

## How to incorporate future health in scenario studies

(pp. 896–901)

Despite the relevance for health of scenario studies — tools for exploring possible futures and outcomes — Martens & Huynen found the health dimension completely lacking in most current scenario studies. Of 31 recently developed scenarios, they found that not even half gave a good description of future health developments; they identified a lack of consistency in the handling of health between the studies. Future developments in health could have been included as an outcome since the major determinants of health were adequately addressed in the studies.

By linking the developments described in the three most recently formulated sets of scenarios to three potential health futures, they illustrate how future health developments can be incorporated into existing scenarios.

## Is malaria vaccine feasible?

If so, which one? (pp. 902–909)

A vaccine for malaria is not "just around the corner" but it is feasible. Webster & Hill discuss advances in malaria vaccine research and review potential vaccine candidates. Advances in genomics, including the mapping of the genomic sequence of *P. falciparum* — the species which causes most deaths from malaria — have suggested vaccine design strategies and potential new vaccines. Favourites in the race include pre-erythrocytic vaccines — attractive since they would prevent both clinical disease and transmission, blood-stage vaccines and transmission-blocking vaccines. Key questions which need to be addressed include: which antigen or combination of antigens to use; which type of immune response should be generated and which stage of the parasite's life cycle should be targeted.

## Public Health Classic: Kwashiorkor remembered

(pp. 910–911)

Michael Krawinkel reviews the identification of kwashiorkor, a severe form of malnutrition, by Cicely D. Williams whose paper originally appeared in the *Lancet* in 1935. Despite advances in research into the management of the disease, the decline in the mortality rate since 1935 is not as sharp as it should have been. Research has focused on pathological and physiological factors; Williams, however, identified the condition as being associated with neglect and concluded that research should focus on social aspects. Despite the potential that care for families with children suffering from kwashiorkor has for prevention and management of the disease, social paediatric practice remains on the periphery of scientific research. The greatest advance since the publication of Williams' paper has been the implementation of WHO's ten steps for the management of severe malnutrition. ■