In this month's Bulletin

Two data sources track poliovirus (pp. 846–851)

The authors calculate the incidence of acute flaccid paralysis caused by poliomyelitis in the State of Victoria, Australia, using two sources: the routine surveillance system, and hospital records. The former reported 14 cases, the latter 19 different ones. Basing calculations on data from both sources by using the capture–recapture method, they conclude that 40 cases would have occurred during the period under review (1998–2000). The results indicate the insensitivity of the existing surveillance system and give an idea of feasible notification rates for other states and countries in which poliovirus has been eradicated.

Simple questions yield prevalence data for eye worm disease (pp. 852–858)

Ivermectin cures river blindness but if taken by patients coinfected with Loa loa (eye worm disease) it can cause encephalopathies with sometimes fatal outcomes. Where L. loa is endemic beyond a certain threshold, community treatment with ivermectin cannot be carried out because the risk is too high. Prevalence can be ascertained from blood samples but this is a costly and cumbersome method. Rapid assessment by questionnaires in local languages in conjunction with a photograph showing the symptoms was found to be a reliable predictor of the prevalence and severity of L. loa infection.

Unsafe injections cost more (pp. 859–870)

In developing countries 20–50% of the injections given are unsafe, and can transmit hepatitis B virus and HIV. Researchers examined the data to compare the inclusive costs of safe and unsafe injections. Resterilizable and disposable needles and syringes had the highest overall cost for device purchase, use and iatrogenic disease. Disposable-cartridge and automatic needleshielding syringes had the lowest costs. Reusable nozzle-jet injectors and auto-disable needle and syringes were intermediate.

Short interval between pregnancies is associated with preterm birth (pp. 871–875)

A short interpregnancy interval is a strong causal factor for spontaneous preterm birth,

according to a study of 128 cases and 128 controls in the United Arab Emirates. The median gestational age of babies born to mothers with an interpregnancy interval of 12.4 months was 35 weeks, whereas for those with an interval of 19.1 months it was 40 weeks. Preterm birth is the most important single cause of perinatal death and congenital disability. A short interval between pregnancies has long been recognized as a potential risk factor but up till now the epidemiological evidence had been equivocal.

Russian survivors validate mortality figures (pp. 876–881)

Researchers interviewed a sample of 531 men and 710 women about the age and vital status of their first spouse, to test the validity of official data on dramatically high mortality and its determinants in the Russian Federation in the early 1990s. Using data ascertained from interviews, the estimated risk of death between 35 and 69 years of age was found to be 57% for husbands and 17% for wives. The corresponding national figures for 1990 were 52% and 25% for the Russian Federation. In the United Kingdom the figures are 31% and 20%.

Best test for trypanosomiasis infection determined

(pp. 882-886)

The classic CATT test was found to be the most efficient means of detecting sleeping sickness in Central African Republic and Côte d'Ivoire. The micro-CATT method can be used if the test is performed on the same day as blood collection or if samples are stored at 4 °C. The Latex test should only be used for high specificity screening. Although 60 million people are exposed daily to human African trypanosomiasis through tsetse fly bites, only 3 million of those at risk are under surveillance. As long as large numbers of people remain infected, active cyclical transmission of the disease continues.

Risk of death extends to 12 weeks after pregnancy outcome (pp. 887–891)

The risk of mortality following pregnancy should be assessed for the first 12 weeks following outcome, rather than the conventional first 6 weeks, according to a large study in Nepal. The conclusion comes from data gathered on 7325 pregnancies during a three-year period of weekly visits to women aged 14–45 years. The relative risk of death was 2.21 during pregnancy until six weeks after outcome, and 2.26 when the period was extended to 12 weeks after pregnancy outcome. For 13–52 weeks after pregnancy it was 1.01.

Lower taxes can increase the demand for bednets

(pp. 892–899)

Insecticide-treated bednets properly used can reduce childhood mortality by 17% and malaria episodes by up to 48%, but only 10% of at-risk children and pregnant women in Africa regularly use them. Minimizing their cost to consumers by abolishing tariffs and taxes on nets and insecticides would probably lead only to a modest short-term increase in the use of them. The case for taking this step turns out to be less clearcut than it seems at first sight.

The case for emergency care where resources are scarce (pp. 900–905)

The authors argue for a basic but effective level of emergency medical care to meet community needs and improve the health of populations. The simplicity of prevention often makes it the natural first choice for medical spending, but many life-threatening injuries and episodes of illness require rapid attention. Obstacles to providing effective emergency medical care in developing countries include lack of structural models, inappropriate training, concerns about cost, and sustainability in the face of high demand.

Public health classic: a boost for skin cancer research in

1977 (pp. 906–912)

In 1977 Fisher & Kripke reported that ultraviolet irradiation could circumvent immunological mechanisms which might otherwise destroy primary tumours. This led to important advances in the study of how excess sun exposure can lead to skin cancers.