

Global Update

News in Brief

Bird flu

A poultry farm owner from Nandurbar district in Maharashtra died of suspected bird flu in Surat on 17th February. Virological confirmation was still awaited as of 22 February. However, the government has confirmed that the H5N1 avian influenza virus has been isolated from poultry which have died in large numbers in Navapur town of Nandurbar district of Maharashtra. The National Disaster Management Authority officials have rapidly swung into action. All poultry in a 3km radius of the epidemic are being culled and buried, while others in a 10 km radius are being vaccinated. The government is giving a compensation of Rs 40 for every chicken culled. Samples of 8 patients in Poona with suspected bird flu have also been sent to the national virological laboratory. Borders across states are being sealed to prevent spread of the disease. The virus is excreted in saliva, nasal secretions and fecal matter of birds. While well cooked chicken does not transmit the disease, chicken sales have fallen dramatically. Eggs may transmit the disease because of external contamination by fecal matter and need careful handling. In poultry it has a high mortality rate in 48 hours. Spread to humans occurs usually in people in close contact with poultry. Spread between humans is rare beyond one step. Although thousands of birds have been affected worldwide, only 170 cases have been confirmed in humans with 90 deaths. However, if the virus mutates it may develop the ability to spread from human to human resulting in an epidemic. Human beings present with clinical features of fever, coryza, body aches and viral pneumonia. Amantidine

and rimantidine are not so effective in the Asian strain, while oseltamavir (Tamiflu-Roche) and zanamavir (Relenza-GlaxoSmith Kline) will probably work better. A vaccine effective against birdflu in humans is not yet available for commercial use. (The Times of India, 19 February 2006).

Inhaled Insulin

For the first time after injectable insulin was developed, a new route of insulin administration will be available for diabetics. Inhaled human recombinant insulin has recently been approved by the FDA for use in diabetics. Sanofi-Aventis and Pfizer are together marketing it calling it Exubera. It is to be inhaled before meals. The safety and efficacy of Exubera have been studied in approximately 2500 adult patients with type 1 and type 2 diabetes. In clinical studies, Exubera reached peak insulin concentration more quickly than regular insulin, administered by an injection. Peak insulin levels were achieved at 49 minutes (range 30 to 90 minutes) with Exubera inhaled insulin compared to 105 minutes (range 60 to 240 minutes) with regular insulin, respectively. In type 1 diabetes, inhaled insulin may be added to longer acting insulins as a replacement for short-acting insulin taken with meals. In type 2 diabetes, inhaled insulin may be used alone, along with oral (non-insulin) pills that control blood sugar, or with longer acting insulins. However because a small decrease in lung functions have been noticed after use, it is not approved for use in smokers or patients with asthma, bronchitis or emphysema. Baseline lung function tests at 6 months and then annually is being currently recommended (BMJ 11 February, www.fda.gov).

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