

# Virus over the horizon

The strain of influenza virus known as H5N1 is giving rise to great anxiety as it makes its appearance in different places. Several articles on the subject appear in the 23 November issue of the *New England Journal of Medicine*. Given the number of cases of H5N1 influenza that have occurred in humans, which is 251 up to September last, and with a mortality rate of more than 50 per cent, it has been considered prudent to work out robust plans for dealing with a likely pandemic.

In South East Asia, where influenza appeared in 1957 and 1968, multiple clades of the virus emerged. In 1996, the H5N1 virus was detected in Guangdong Province, China, following where geese were first killed. In the following year, the virus spread from poultry markets in Hong Kong and killed six of the 18 humans infected. Culling all Hong Kong poultry controlled the first wave, but the virus circulated among otherwise healthy ducks in the Chinese coastal provinces.

Until May 2005, the H5N1 viruses were confined to South East Asia but after the infection of wild birds in Qinghai Lake, they spread westwards and killed swans and geese in

Europe, India and Africa. Highly pathogenic strains, which infected humans, were detected in Turkey.

Unfortunately, different clades and subclades may make different vaccines necessary to control them, although clades may cross-protect against fatal influenza. Neuraminidase inhibitors (eg, oseltamivir) have to be commenced within two days to protect humans, and delay in starting treatment may lead to the production of resistant strains of virus. A polymerase chain reaction with nasopharyngeal specimens may be used in diagnosis. A vaccination strategy for poultry, using inactivated oil emulsion preparations has been useful, but probably does not control spread in waterfowl.

Meanwhile the number of infections in humans continues to increase. The virus is always changing. The seasonality of H5N1 resembles that of human influenza, transmission being greater in the cooler months. It is speculated whether it can cross from Eurasia to the Americas and another question is whether or not wild migratory birds can carry it from the north into commercial poultry in Europe, Africa and America.

## Getting treasure seekers to act responsibly

I can remember when I was a schoolboy and spending holidays by the sea — only a mile or two away from home — the excitement at finding, during a lunch among the sand dunes, a valuable-looking ring in the middle of a dune. Such an event is rare indeed, although the discovery of metal seals and rugged hunks of shrapnel left by wartime activities have not been uncommon in my experience. In recent years, while wandering along the seashore, I have observed quite a few individuals combing the high-tide zone with metal detectors slung across their shoulders.

As an amateur archaeologist, after a university course, I have been rather suspicious of the casual metal-hunter, because I have reason to believe that he (I have yet to encounter any women) rarely records a find for scientific reasons but loses it among the junk accumulated over the years. The latest issue of *Current Archaeology* carries an article dealing with this issue of how far individuals with metal detectors should be encouraged to promote their hobby and how much they should be discouraged. Much heat has sometimes been generated between amateur treasure-hunters and serious archaeologists.

The education officer for the Portable Antiquities Scheme based at the British Museum, Ceinwen Paynton, maintains that the recording of amateur finds is “revolutionising archaeology in England and Wales”. A code has been drawn up, endorsed by interested bodies, by which responsible detector-



wielders will regulate their activities, so that their contribution to our knowledge of the past will be positive. “The hobby of metal detecting gets a worse press than it deserves because of a few criminals,” says Ms Paynton. “And they are criminals — they trespass and steal or plunder archaeological sites for financial gain...”. Sadly, the same is true of a vast number of human activities, and we have to live with the results whether we like it or not.

## Charms to sooth a troubled breast

Music and medicine seem to have some characteristics in common. I must admit that most of my encounters with serious music have been in a hospital setting, although at an earlier stage I had a friend who was closely associated with the celebrated Dolmetsch family and with whom I played on piano, violin and double bass. In a pharmaceutical career I have met many who share the joy of making part of a trio or quartet, and of singing in choirs — even in the Royal Albert Hall.

In the 25 November issue of *BMJ Careers* an Edinburgh ophthalmologist reflects on how he has combined music with medicine, and writes that he spends most of his non-doctoring time playing, recording or composing music. He finds in music the perfect balance or antidote to a hard week's doctoring and a means of winding down.

Whether we play an instrument or merely listen to others doing so, our mood is greatly influenced by music. This can follow contrasting paths, of course, but provided the music is serious and not just noise, as so much of it is in these days when many lack discrimination, there is a healing link between our body rhythms and the beat and melody of music. Attempts to image brain activity during musical activity have not been productive, although we know that as regards rhythm at least, music sets muscular responses.

One promising development in health care is the use of music therapy. It has been found valuable useful in palliative care, where it may reduce the need of a sick person for analgesia through drugs. Moreover, listening to music decreases anxiety, reduces pain and improves sleep. For a practising doctor, playing an instrument helps both motor skills and memory.

It is not wise to view music solely as an art and to neglect the value of its soothing effects both on those who receive health care and on those who become stressed as providers of health care.

It is interesting to note that in Australia combined medical and music degrees are now available. The idea makes sound sense.

### Loathsome custom

“Smoking is a custom loathsome to the eye, hateful to the nose, harmful to the brain, dangerous to the lungs, and in the black, stinking fume thereof nearest resembling the horrible Stygian smoke of the pit that is bottomless.” — King James I of England (1566-1625), A Counter-blaste to Tobacco (1604) [written shortly after Sir Walter Raleigh introduced tobacco to England from the Americas].

And I quote . . .