Insight: Answers

The Insight questions and answers are designed to test your knowledge of the fields covered by papers in this issue and are intended as a contribution to your personal, continuing, occupational medicine education. The questions answered here are on the preceding pages.

1. When calculating the incidence rate of eye accidents at work in 1996 the following information is required:
   a. True.
   b. False. This is a prevalence figure.
   c. False. This is needed in calculating severity rates.
   d. False.
   e. True. The formula required is: \( \frac{N \times 1,000}{AV} \) where \( N \) = Number of new eye injuries in 1996 and \( AV \) = Average number of employees at risk. The result is given as: eye injuries per 1,000 employees at risk.

2. Workplace accidents and occupational ill health:
   a. True.
   b. True.
   c. False. They usually arise from latent failures for which senior management is responsible.
   d. True.
   e. False. The estimate in 1993 was a loss of 30 million workdays.

3. In acute organophosphate poisoning:
   a. True. At both muscarinic and nicotinic synapses.
   b. True. See article by Gomes et al.
   c. False. This is an example of biological effect monitoring. The measurement of metabolites in the urine is an example of biological monitoring.
   d. True.
   e. False. Recovery is slow. It is stated that depressed cholinesterase activity may take up to 60 days to recover to baseline levels.

4. In carbamate poisoning:
   a. True. Except that they tend to be milder and more short-lived.
   b. False. It may be inaccurate as \textit{in vivo} and \textit{in vitro} reactivation of cholinesterase is described.
   c. False. The administration of pralidoxime is contraindicated as it may enhance acetylcholinesterase in activation.
   d. True.
   e. True.

5. Patient satisfaction:
   a. True.
   b. False. It may be a predictor of whether patients follow the recommended treatment.
   c. True. It can be used to assess consultations and patterns of communication.
   d. True. There is evidence to suggest that satisfaction is related to improvement in health status.
   e. True.
6. Health surveillance under COSHH:
   a. False. A health record is always a requirement.
   b. True. For example, Hepatitis B.
   c. True. Examples include substances which can cause cancer of the urinary tract.
   d. True. For example, in the case of substances likely to cause dermatitis.
   e. False. Lead is not included in COSHH. The health surveillance arrangements are contained in the approved Code of Practice which accompanies The Control of Lead at Work Regulations.

7. Airways disease in tea manufacturing:
   a. True. Harvesting, rolling and fermentation of tea do not appear to be associated with airways disease.
   b. False. Tea dust is associated with small airways obstruction, however, FEF25-75% reflects small airways function whilst FEV₁ is an indicator of overall airways function.
   c. True. A number of studies from Sri Lanka have indicated effects on the respiratory system of long-term exposure to tea dust.
   d. True. As with many occupational diseases good occupational hygiene will assist in preventing airways disease in the tea manufacturing industry.
   e. True. Apart from tea dust, a variety of chemicals used in the manufacture of tea may cause respiratory disease. One study from Sri Lanka (which included an assessment of airways disease) showed no ill health effects in tea plantation workers who had sprayed long-term with paraquat. Occupational hygiene standards are strong determinants of outcome in such studies.

8. Lung function tests:
   a. False. In one study, the variability ranged from $± 3.5\%$ for FVC, TLC and the accessible gas volume of the lung to $± 14\%$ for RV.
   b. True. This is their main benefit.
   c. False. Neither do they reflect quality of life.
   d. False. There is a large residual variation such that the range of normality about a regression line is approximately $± 15\%$.
   e. False. All routine lung function tests require patients to make maximal manoeuvres.

9. The functions of the occupational health committee include:
   a. True.
   b. True.
   c. True.
   d. True.
   e. True.

REFERENCES
1. HMSO. Successful Health and Safety Management. HS(G)65 HMSO, 1993.