Team triage improves A&E department efficiency

A nurse and doctor triage team can significantly reduce the time to medical assessment, radiology and discharge in A&E. Researchers from Belfast tested team triage against the usual nurse-led triage over an eight-day period. On four of the days team triage was co-ordinated by a nurse and middle grade doctor or consultant between 9am and midday. All patients attending the department were included in the study.

Median times were significantly reduced during the intervention. Time to triage during the intervention was two minutes versus seven minutes with usual triage (p=0.029), to see a doctor two versus 32 minutes (p=0.029), and to radiology 11.5 versus 44.5 minutes (p=0.029). Waiting times at midday were longer for patients in the non-intervention group. More patients were seen and discharged within 20 minutes in the intervention group (19 versus 3 per cent). No significant knock on effect was seen for the remaining 21 hours after the intervention ceased.


Firefighters most at risk from burning buildings

Fires in buildings pose particular hazards to firefighters and additional efforts need to be made to reduce firefighter fatalities when they tackle ‘structure-related events’. Researchers from the United States reviewed the causes of death while on duty of all firefighters between 1998 and 2001. Data were obtained from the United States Fire Administration and classified into three main categories of medical (non-traumatic), motor vehicle related and other traumatic fatalities.

During this period, there were 410 deaths on duty, excluding the 343 firefighters who died at the World Trade Center on September 11 2001. The 410 fatalities included 191 medical non-traumatic deaths (47 per cent), 75 motor vehicle related fatalities (18 per cent) and 144 other traumatic fatalities (35 per cent). The latter group included 68 fatalities that were associated with buildings which commonly involved structural collapse, rapid fire progression and trapped firefighters.


Living near a petrol station is a risk factor for leukaemia

Living close to a petrol station or car repair workshop might be a risk factor for acute childhood leukaemia, French researchers report. To analyse the association between potential environmental exposure to hydrocarbons and the risk of acute childhood leukaemia, the researchers undertook a hospital-based multicentre case control study. The mothers of 280 children with leukaemia and 285 controls were interviewed.

No clear association was seen between occupational exposure to hydrocarbons during pregnancy and leukaemia or between residential traffic density and leukaemia. There was an association between dwellings neighbouring a petrol station or repair garage during childhood and the risk of childhood leukaemia (odds ratio 4.0), with a duration trend. The association, which appeared particularly strong for acute non-lymphocytic leukaemia (odds ratio 7.7), was not altered by adjustment for potential confounding factors. The authors say these findings could be due to chance, but the strength of the association and the duration trend are arguments for a causal association.


Long spells in front of the TV inactivate spinal muscles

Muscles which normally support and protect the lower back could become inactive as a result of slumping in front of the TV or computer screen. Australian researchers studied 19 male volunteers who spent eight weeks in bed. Using magnetic resonance imaging they found that after eight weeks in bed the lumbar multifidus muscles in all the 19 subjects had become inactive. Lumbar multifidus muscles normally keep the spinal vertebrae in place. Back pain can result when they are inactive. And the researchers found that simply getting up and walking around was ineffective in reactivating the muscles. Some of the volunteers have been monitored for six months and even in those who exercised, their muscles had still not recovered. However, the researchers say the muscles can be reactivated by using visual feedback from ultrasound scans.