

Public health round-up

Diesel exhaust carcinogenic



Mark Edwards's HardRain Collection

The International Agency for Research on Cancer (IARC) classifies diesel engine exhaust as carcinogenic in humans. The statement followed a week-long meeting in Lyon, France, in early June.

Concern about the carcinogenic potential of diesel exhaust comes mostly from epidemiological studies of worker exposure. A large study conducted jointly by the US National Cancer Institute and the National Institute for Occupational Safety and Health published in 2012 showed an increased risk of death from lung cancer among underground miners exposed to diesel fumes.

Diesel combustion produces many more particles per unit volume of air than gasoline combustion, and the higher the particle concentration in ambient air, the greater the risk of lung and heart disease. Air pollution causes a large disease burden and approximately 1.3 million deaths a year in cities with more than 100 000 inhabitants. Diesel also generates potent short-acting pollutants linked with climate change.

IV overload

Health officials in China are urging the population to avoid overusing intravenous (IV) fluids. This is because the National Development and Reform Commission, the top body responsible for China's health reform, revealed that in 2009 China consumed 10.4 billion bottles of IV fluid, equivalent to eight bottles per capita, an amount far in excess of the international average of 2.5 to 3.3 bottles per inhabitant.

The prevailing belief in China is that IV fluid gets to the source of illness and disease more quickly. As a result, a forest of IV fluid stands can be seen in many hospitals and community health centres. Many patients demand IV antibiotics and doctors generally comply. Health department officials have warned that

this practice can lead to adverse drug reactions, iatrogenic infections and other serious health problems. They have also urged members of the public to treat IV infusion as a last resort rather than the norm.

Health priority-setting

'Building institutions for smarter public spending' is the subject of a new report by the Center for Global Development (CGD) in Washington.

In today's global health arena, where resources are limited and demands are growing, policy-makers constantly face budgetary dilemmas with little expert guidance. The report aims to guide policy-makers on setting priorities in public health.

To illustrate the point, in Egypt one out of five children is stunted due

to poor nutrition, but 20% of public spending on health is used to send patients overseas for treatment. The solution recommended by the working group that wrote the CDG report is the creation of a global health technology assessment facility that would provide technical and consultative support to global funding agencies and developing country governments. "What we're recommending is a global health technology assessment facility that could carry out analyses that would be better done together in groups, so you wouldn't have to repeat studies in different countries," explained Amanda Glassman, one of the report's co-authors.

Action against gonorrhoea needed

Millions of people with gonorrhoea may soon run out of treatment options unless urgent action is taken, according to the World Health Organization (WHO). Several countries, including Australia, France, Japan, Norway, Sweden and the United Kingdom of Great Britain and Northern Ireland, are reporting cases of resistance to cephalosporins – the last treatment option against gonorrhoea. Every year an estimated 106 million people contract gonorrhoea, which is transmitted sexually. "Gonorrhoea is becoming a major public health challenge due to the high incidence of infections accompanied by dwindling treatment options," said Manjula Lusti-Narasimhan, from the Department of Reproductive Health and Research at WHO. "The available data only show the tip of the iceberg."

In new guidance issued on 6 June, WHO is calling for greater vigilance on the correct use of antibiotics and more research into alternative treatment regimens for gonococcal infection.

Measles outbreak

Parents in Ireland are being warned of the importance of protecting their children against measles following an outbreak of this infectious disease in West Cork, south-western Ireland. The country's Health Service Executive has reported that the outbreak has now affected 51

children, including two who have been hospitalized. Most of the children infected are teenagers and 88% of cases have never received any dose of the measles, mumps and rubella (MMR) vaccine.

Families are being urged to get their children fully vaccinated with the two standard doses of the MMR vaccine before travelling within Ireland or to other European destinations during the summer holidays.

Although most common in children, measles can occur at any age. It is extremely infectious and can be caught either through direct contact with an infected person or by exposure to aerosol droplets released from the respiratory tracts of infected individuals when they cough or sneeze.

UK hospital infections drop

The fraction of health-care-associated infections (HCAI) among patients in hospitals in the United Kingdom has dropped from 8.2% to 6.4% of admissions between 2006 and 2011, according to a survey by the United Kingdom Health Protection Agency (HPA). Over this period, 3360 patients were diagnosed with an active HCAI and 135 were found to have more than one. HCAs of the respiratory tract, the urinary tract and the site of surgery were the most common (22.8%, 17.2% and 15.7%, respectively).

Since 2006 there has been an 18-fold reduction in methicillin-resistant *Staphylococcus aureus* bloodstream infections and a five-fold reduction in *Clostridium difficile* infections.

Susan Hopkins, health care epidemiologist at the HPA and lead author of the report, said: "This report is an important collaboration between a great many different organizations and experts. It gives us a clear picture of the different types of infections that are occurring in hospitals and the bugs that cause them."

Rotavirus vaccine

Vaccination against rotavirus has now been introduced into Rwanda's routine immunization programme. As a result, about 438 000 children in the country will be protected against rotavirus infection every year. Rotavirus currently takes the lives of nearly 3500 Rwandan children annually and causes 8.8% of all deaths among Rwandan children less than five years of age.

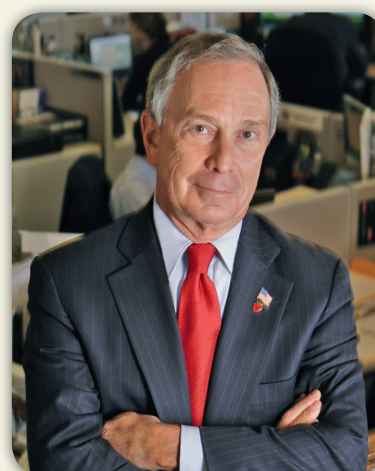
Sugary drinks targeted

In an effort to combat obesity, Michael Bloomberg, mayor of New York City, wants to limit the size of the sugary drinks sold throughout the city to no more than 16 ounces.

Under the proposal, which would come into force in March 2013, drinks over that size would be banned in about 20 000 food establishments and mobile carts, as well as in cinemas, stadiums and sports arenas. The ban would apply to both bottled and soda fountain beverages except for diet drinks or those with fewer than 25 calories per eight ounces.

Outlets failing to comply would be fined US\$ 200 per offence. However, supermarkets and grocery stores would be exempted from the ban.

"Limiting the size of sugary drinks to no more than 16 ounces at food service establishments will help us confront the obesity and diabetes epidemics, which now affect millions of New Yorkers," said New York City Health Commissioner Thomas Farley.



Spencer Tucker

The introduction of rotavirus vaccines into the country's routine immunization programme marks an historic landmark in improving access to life-saving tools for those children who need them the most. African children carry the heaviest burden of rotavirus disease. Around 40% of Rwandan children hospitalized for diarrhoea test positive for rotavirus. Rotavirus surveillance was established in Rwanda in 2010 to more accurately estimate the burden of rotavirus disease and to monitor the impact of vaccine introduction.

Child and maternal deaths down

The number of maternal deaths occurring annually has declined by almost half since 1990. Furthermore, between 1990 and 2010, deaths among young children declined from 12 to 7.6 million, according to a report.

Some of the world's poorest countries have achieved spectacular progress in reducing child deaths, the report says. Rates of child mortality in many African countries have been dropping twice as fast in recent years as during the 1990s. In Botswana, Egypt, Liberia, Madagascar, Malawi, Rwanda and the

United Republic of Tanzania, the rate of decline was 5% or more a year on average between 2000 and 2010.

The report, *Building a future for women and children*, is published by the Countdown to 2015 initiative, a multi-agency partnership which includes the World Health Organization. ■

Looking ahead

22–27 July: XIX International Aids Conference, Washington DC, USA <http://www.aids2012.org>

28 July: World Hepatitis Day http://www.who.int/mediacentre/events/annual/world_hepatitis_day

1–7 August: World Breastfeeding Week <http://worldbreastfeedingweek.org>

19 August: World Humanitarian Day <http://ochaonline.un.org/whd>

10 September: World Suicide Prevention Day <http://www.iasp.info/wspd>

28 September: World Rabies Day <http://www.worldrabiesday.org>

29 September: World Heart Day <http://www.world-heart-federation.org/what-we-do/awareness/world-heart-day>