Title: Shield 1992-2012: 20 years of a reporting scheme for occupational asthma

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Body: SHIELD is the Midland Thoracic Society's rare surveillance scheme for occupational asthma in the West Midlands, England, UK (working population 2.2 million). The database is a useful tool to locate outbreaks within a particular field of work and discover causative agents. There have been 1644 notifications of occupational asthma since January 1992.

Isocyanates have been the commonest cause of occupational asthma over the last 20 years accounting for an average of 21% of all cases until 2005 when notifications dropped. Metal working fluid notification peaked in 2004 and 2005 due to a large outbreak in the manufacture of car engines; there has since been a smaller outbreak in another engineering works. Notification of occupational asthma to cleaning agents has risen in recent years. These include chlorine based products, products containing benzalkonium chloride and alcohol hand gels. Chrome outbreaks have been related to stainless steel manufacture (welding and milling). Flour/amylase reports have risen in the last 2 years but cobalt, colophony and latex have remained at a low stable level. The latter agents are likely to remain low due to the availability of colopony-free solders and nitrile/vinyl gloves. In summary, Shield remains a useful tool to identify occupational asthma outbreaks and trends in data. Although isocyanates remains the biggest offender, new causes are still being identified and old ones re-surfacing in different industries.