

Primary and secondary asbestos-related prevention in Germany – from the first BG Rules to 30 years of the Central Registration Agency for Employees Exposed to Asbestos Dust ("ZAs")

Legal basis and primary prevention

German industry began using asbestos in the last third of the 19th century. Although medical findings to the contrary had been published as early as 1871, the Accident Prevention Act of 1883 completely excluded work-related illnesses. It was not until December 1936 that "severe asbestos-dust lung disease (asbestosis)" was included in the register of occupational diseases for which compensation had to be paid. Over the course of many decades, the legislature and the self-administrated statutory accident-insurance institutions introduced separate and complementary primary and secondary measures to minimise health risks posed by asbestos.

- 1940:** Guidelines of the institutions for statutory accident insurance and prevention ("Berufsgenossenschafts") aimed at combating the dust risk in enterprises which use asbestos.
- 1973:** Accident-prevention regulation, "Harmful mineral dust (VBG 119)" = Obligation to give notification of work involving asbestos.
- 1979:** Ban on the processing of sprayed asbestos.
- 1993:** On the basis of the Hazardous Substances Ordinance: comprehensive ban on the production and use of asbestos; exemptions for demolition, clean-up and maintenance work (details: Technical Rule for Hazardous Substances 519 and BG Information Sheet 664).

Secondary prevention

- 1973:** Obligation to undergo occupational-health screenings before, during and after asbestos exposure, in accordance with VBG 119.
- 1972:** Establishment of the **Central Registration Agency for Employees Exposed to Asbestos Dust (ZAs)** by the Berufsgenossenschafts.

Tasks and funding of ZAs

A central service provider for 63 statutory accident-insurance institutions, the ZAs performs three main tasks, set down in law, as follows:

- computer-aided registration of data on workers exposed to asbestos dust;
- organisation of follow-up and post-exposure examinations;

- storage, within the constraints of the Data Protection Act, of personal, employment-history and medical data and provision of data on individual cases for determining benefit entitlements for sufferers of occupational diseases at a later stage or collective data for research purposes.

The ZAs' administration expenses (2002: approx. € 2.2 million) are divided up among the accident-insurance institutions.

Content of the ZAs database

- Personal data such as name, address, date of birth, gender and, as a reference number, statutory pension-insurance number
- Exposure data such as start date, end date and nature of work with asbestos
- Data on medical examinations such as date of examination, name and address of doctor and, if the worker consents, results.

As at 31.12.2002, 479,266 workers were registered as having been exposed to asbestos. Some 62,000 of them were still exposed (clean-up work) and around 229,300 had been exposed in the past. Just under 46,900 companies (producers or users of asbestos) were registered and 18,450 still worked with asbestos.

The medical examination programme

The programme of occupational-health examinations comprises:

- employment and medical history,
- physical examination,
- examination of pulmonary function,
- posterior-to-anterior chest X-ray and
- computer tomograph of the chest in unclear cases.

The examinations are offered at a location near to the subject's place of residence and at intervals of one to three years depending on age, latency period and level of exposure/type of activity (currently approximately 65,000 post-exposure examinations per year and the trend is growing).

Organisation

The ZAs issues the doctor with the examination instructions, including any personal, work-related or medical information available. The doctor documents the examination data, advises the worker and presents a notice of a suspected occupational disease if necessary. In the last four years, substantiated suspicion of an occupational disease was reported in an average of 890 cases per year.

Quality assurance

- The scope of the examinations is specified in a recommendation.
- The examination must be documented in standardised form.
- The doctors must be specialised in a certain discipline: occupational medicine, internal medicine or pneumology; have attended a three-day introductory course, undergo regular continuing training and use the ILO classification system for pneumoconioses.
- Electronic data interchange is to be introduced between ZAs and doctors in the near future. This will enhance the documentation quality further because integrated validity checks will facilitate non-contradictory documentation of results.

The commissioned doctors receive expert advice from radiologists and occupational health professionals (second opinions). When doctors, OH&S experts and administrative employees leave, there is a risk that valuable knowledge on asbestos technology will be lost. Accident insurers are seeking to secure the knowledge base for the future by means of case studies, photographic and film material plus documentation yet to be produced about specific activities and exposure levels.

Research

The more conclusive the information on file concerning the activity/exposure, the easier it is to form tailored, risk-adapted groups to design the occupational health screenings and conduct scientific research.

The Berufsgenossenschafts have provided joint financial support for a range of research projects, e.g. aimed at improving early diagnosis, over the last twenty years. In Germany, we have been discussing the necessity and benefits of CT, sputum cytology or cytometry and tumour markers for asbestos-related screening for some time.