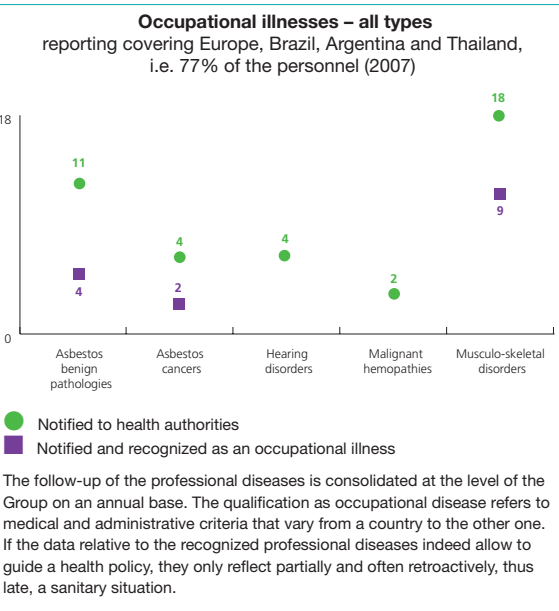
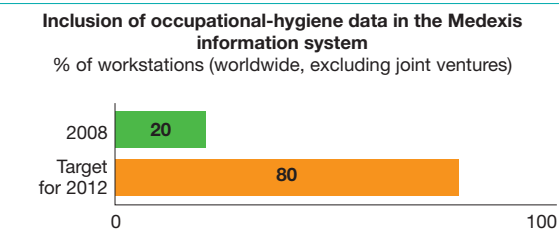
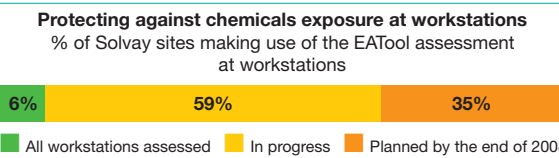


# Occupational hygiene

## 1

### Strategy

- Complying with laws and Solvay guideline values for chemical, physical and ergonomic risks.
- Protecting against risks at their source.
- Assessing risks for each workstation, using a reliable standardized method that allows comparisons between workstations and between sites.



For occupational hygiene, Solvay applies the internationally recognized **Threshold Limit Values (TLVs)** devised by the American Conference of Governmental Industrial Hygienists, for all hazardous substances not covered by laws, or for which the legal limit is less stringent than the reference TLV, or is outdated. In cases where these external reference values do not exist, Solvay carries out studies in order to decide on a Solvay Acceptable Exposure Limit (SAEL).

To ensure compliance with these standards, the emphasis is now put on general adoption in all entities of a standardized method, the **Exposure Assessment Tool (EA Tool)**, for assessing all chemical risks at workstations. The EA Tool incorporates the latest international standards, the chemicals' characteristics, the quantities used in each workstation, the operating procedures and the exposure levels. The information on occupational-hygiene conditions is progressively being incorporated into the Hygiene module of the new Medexis global information system developed by Solvay.

Two new management indicators relating to compliance of workstations with occupational-hygiene limits have been introduced recently, making it possible to monitor compliance both locally and worldwide, thus providing better management of worker protection ■

#### Medexis : the way to achieving better health protection

Medexis is a single computerized system that will bring together data on industrial hygiene and medical monitoring in all of Solvay's sites. It is currently at the pilot stage. When combining data collected in each individual site, it will become possible, while respecting the rules of protection of personal data to exploit this information in order

- to better identify situations needing improvement,
- to better communicate the situation and progress

In each country, implementation of the Medexis system will depend on receiving approval from the public authorities, and on the way in which the national system for health at work is organized.

Policies and management tools for health and industrial hygiene, see page 88

### Targets for 2012

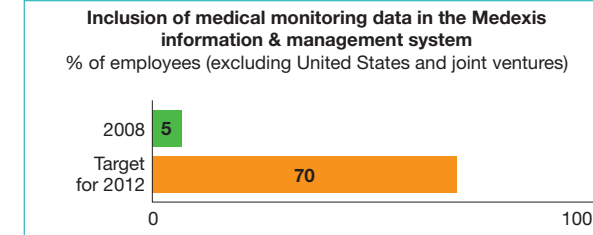
- Applying the Hygiene module of Solvay's Medexis information system to 80% of the workstations in the Group (not including joint-ventures), in view of a uniform prevention of health risks.
- Using the standardized Exposure Assessment (EA) Tool for hazardous chemicals at all sites and for all the workstations (2008); introducing the new occupational-hygiene indicators into practice, and examining them as part of management reviews.
- Making ergonomic assessment of workstations routine, including for administrative functions, in order to provide better protection against musculo-skeletal disorders.
- Getting the management of safety, health and hygiene at work certified according to the OHSAS 18001 reference systems at 30 production sites.

# Health protection

## 2

### Strategy

- Ensuring a uniform level of health protection, by applying a consistent system of medical monitoring for employees throughout the Group.
- Protecting against occupational diseases that are still observed: primarily musculo-skeletal and auditory disorders. Prevent stress.
- Ensuring medical monitoring of employees adapted to the individual risk profile of each workstation.



#### Determination of risk profiles

Medical surveillance throughout the working lives and afterwards is important, also from epidemiological and legal standpoints. We therefore consider it vital to ensure the tracing of data related to health at work for each employee.

We aim to introduce, for each employee, a personal logbook recording exposure to occupational risk, to be included in his/her "health at work" file. Traceability of exposure to risk situations will be constructed on the basis of homogeneous groups exposed to the same work situations, and will be managed using our EA-Tool. It is based on a collective approach constructed on job types (Work area). On this basis, company doctors, by combining this information with other data, will get a better view of the diverse situations encountered by different workers.

### Targets for 2012

- Applying the Health module of Solvay's Medexis information system to 70% of the personnel (not including the United States) with the aim to ensure a uniform prevention against health risks and a uniform medical monitoring throughout the Group.
- Taking account in medical monitoring of all the occupational risk factors, including those in the past, and applying the same health-monitoring procedures worldwide for each risk profile.
- Improving traceability of each individual's medical monitoring throughout the person's working life.
- Applying the Group's preparedness plan for a human pandemic originating from avian influenza.

Solvay looks at employee health in its widest sense, that is to say embracing a high degree of physical, mental and social wellbeing, in accordance with the definition of the World Health Organization. In particular, this implies preventing stress and all forms of harassment at work.

The application of the rules and principles of occupational hygiene at the workplace form the fundamentals of our action. Raising individual awareness and organizing training about health risks are key elements of prevention.

Every member of staff exposed to risks has access to a medical monitoring by a occupational physician. The Group tries permanently to unify the protocols of medical surveillance at the world level to ensure an equivalent follow-up in all the entities and concerned countries.

In the event of a health problem being observed that could be of occupational origin, an investigation is carried out, looking at both the working conditions and the characteristics of the person affected, leading if necessary to corrective measures being taken.

The protection against the chemical risk is ensured by the earliest possible detection of any clinical disturbance, and using biological analyses so as to detect and measure either the possible penetration of the substance in the body, or its possible biological effects, at a moment where they are not yet pathological. The emphasis will be put on new ways of identifying health disturbances even earlier, before there are any manifestations of disease and at the stage where the disturbances are reversible.

With regard to protection against risks, the emphasis is on the main occupational illnesses still observed: musculo-skeletal disorders and hearing losses. The prevention of hearing disorders is improving, thanks to action to raise awareness, to the more systematic bearing of the protection equipments, and the search for comfortable and effective equipment. The campaigns of noise measurement will be reinforced. Programmes defined to better prevent musculo-skeletal disorders include technical and organizational improvements.

A Solvay policy to prevent stress and protect against drug addiction has been worked out, and pilot application of the measures is being undertaken at certain sites.

In some cases, the medical action taken can go further than what is strictly work-related medicine applying to our employees. Such action also contributes to the general overall wellbeing at work, which the Group considers as an important factor for the quality of its activities. Health-promotion campaigns relating to the environment outside work are carried out regularly. Recent examples were in Spain, on protecting against cardiovascular risk, on vaccinating against influenza and viral hepatitis in Thailand and in Brazil, or on general medical check-ups, guarding against consuming alcohol at work, or organizing a programme against AIDS in Namibia ■