GUIDE FOR PEOPLE EXPOSED TO ASBESTOS AND THOSE SUFFERING FROM THE RELATED DISEASES

The Organisation for Respiratory Health in Finland seeks to promote respiratory health and the quality of life among people with respiratory diseases.
As a material asbestos, whose disadvantages were recognised long ago, is the most significant cause of adverse occupational health effects. Although the use of asbestos is now banned, due to its previous use there are still around 50,000 asbestos-exposed individuals living in Finland. Almost 600 cases of occupational disease caused by asbestos are identified or suspected every year. Annually more than hundred people die of asbestos-induced occupational diseases, primarily cancers.

The number of asbestos-related diseases is currently at its peak.

The underlying cause of these diseases is asbestos exposure in past decades; a long delay of 10–40 years occurs between asbestos exposure and the diagnosis of subsequent diseases. Most new diagnoses relate to benign pleural thickenings or plaques.

What is asbestos?

Asbestos is a generic term for earth-born fibrous silicate minerals. There are several types of asbestos, each of which shares the same adverse health effects insofar as, when it is suspected that a patient is suffering from an occupational disease, overall exposure to asbestos is considered with no regard for the specific types in question.

Use of asbestos and the related restrictions

Asbestos was first used at the beginning of the 20th century. Despite the fact that the adverse effects of asbestos were recognised decades ago, more than 2 million tons of asbestos are still produced in the world every year. In Finland, the use of asbestos peaked in the 1960s and 1970s.

The first legal restrictions on the use of asbestos were implemented in Finland in 1976. Furthermore, in 1988 asbestos work was declared subject to a licence and special training was required. Since then, the use of asbestos has been low. The use and importation of and trade in asbestos have been banned since 1994.

Most asbestos exposure has occurred in the building trade. Key applications of asbestos have included asbestos-cement products – such as Minerit, Vartti and Luja – which were used as sheets for walls and roofs. Large asbestos dust levels have arisen, particularly during the processing of asbestos sheets.

Asbestos-containing mass was used to insulate heating pipes and boilers until 1973. In addition, asbestos sprays have been used in structures as fire, ventilation, heat and acoustic insulators.

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Diffuse pulmonary fibrosis

Asbestosis or diffuse pulmonary fibrosis is a traditional asbestos-related disease. It is characterised by the development of additional fibrous tissue (fibrosis) bilaterally in the lower parts of the lungs. Once it has progressed, this fibrosis becomes visible in a regular lung x-ray. In its earlier stages, the fibrosis can be viewed with greater precision using a special imaging method so-called high-resolution computed tomography (HRCT). An HRCT is therefore taken in every suspected case of asbestosis.

Lung cancer

Lung cancer is a serious disease which can be induced by asbestos. Compensation is payable for all types of lung cancer originating in the bronchi and lung tissue, if it is confirmed that an occupational disease is in question.

To fulfil the grounds for compensation, such exposure must be clearly demonstrated. For example, a worker may be considered to have doubled his or her risk of contracting the disease if he or she worked in construction for 10–20 years prior to the mid-1980s.

When considering cases of lung cancer, it is important to take account of asbestos exposure during the patient’s entire employment history.

Smoking significantly raises the risk of lung cancer; account should be taken of this during prevention in particular. On the other hand, with respect to categorising a disease as occupational smoking does not impact on the solution, since the categorisation decision is made solely on the basis of the additional risk caused by asbestos.

Malignant tumour of pleura or peritoneum

Mesothelioma, or a malignant pleural or peritoneal tumour, is the compensable occupational disease which bears the most direct relationship to exposure to asbestos. Above 80% of patients with mesothelioma have been exposed to asbestos. The disease may also develop as a result of mild exposure.

Even minor work-related exposure to asbestos is sufficient for a case to be recognised as an instance of an occupational disease. However, at least ten years must have passed since exposure began.

Since smoking is unconnected to the development of mesothelioma, it is not taken into account when deciding on compensation.

Retroperitoneal fibrosis

Retroperitoneal fibrosis is a very rare disease whose origin may yet be confirmed as consisting of occupational exposure to asbestos. In the case of this disease, an inflammatory fibrous tissue mass grows behind the membrane lining the cavity of the abdomen, which can cause a blockage of a ureter leading outwards from one of the kidneys.

Mesothelioma is the compensable occupational disease which is most directly related to exposure to asbestos. Another serious asbestos-induced disease is lung cancer.
Asbestos exposure at work

Asbestos exposure refers to breathing asbestos, in the form of a fine dust, into the lungs. All individuals who have worked at construction sites in recent decades have had some level of asbestos exposure. Asbestos dust, which is powdery and very light, may have spread throughout a building, or settled dust may have billowed due to motion in a room.

The occupational groups with the greatest exposure have been insulation workers, plumbers, carpenters, site cleaners and handymen. Even master builders have not avoided exposure.

Repair and renovation work was undertaken with no regard for dust until the second half of the 1980s, and exposure was therefore large. In addition to those who participated in actual demolition work, all other workers at renovation sites were subject to significant exposure to asbestos.

Asbestos use in the manufacture of asbestos products continued until 1988. Significant exposure usually occurred throughout asbestos factories.

Moreover, asbestos has been widely used as a pipe and furnace insulator in industrial plants and power plants. Exposure has frequently occurred during installation and demolition work.

Although asbestos quarrying has been halted, consideration must be given to potential asbestos in the ground during any mining and quarrying work.

Seals, filters, cylinders and friction materials in the brakes of various machines have been less significant sources of asbestos exposure. Asbestos-containing brake and clutch materials were commonly used until the first half of the 1990s.

In garages, the most notable asbestos dust contents have been encountered during the servicing and repair of heavy vehicles, particularly during grinding work on asbestos materials such as brake linings. Lower exposure has been encountered during car servicing.

Asbestos exposure outside work

Environmental exposure to asbestos has mainly occurred in the surroundings of asbestos factories and due to brake materials from cars. Asbestos fibres have also been emitted from quarries, building sites and docks. Such exposure has generally been minimal.

Asbestos was installed in almost every house that was built or renovated between 1930 and the 1970s. Asbestos exposure in the home has mainly occurred when handling asbestos-cement sheets and installing or removing boiler room insulation. Such exposure has often been one-off or otherwise temporary, thus rarely resulting in asbestos-induced diseases.

No significant exposure has been caused by the asbestos-cement sheets used behind sauna stoves.

Suspecting the presence of asbestos and removing it

When planning demolition work, an asbestos survey must be performed or steps must be taken to clarify whether asbestos is present on the renovation site. Samples of suspicious materials can be taken for laboratory testing.

Asbestos demolition work is subject to a licence. Companies as well as employees undertaking asbestos demolition work must have had the related training and hold a permit from the industrial safety authority.

Demolition work sites must be insulated to avoid the spread of dust. Rigorous cleaning and airing must be arranged after demolition. When undertaking asbestos demolition work, it is essential to ensure that no health hazards are posed to workers, other parties or the environment at any stage of the process.
Follow-up of people exposed to asbestos or who have asbestos-related diseases

Due to the wide range of asbestos-related diseases, the injurious effects and progress of the disease in question also tend to vary. The extent of the disability is estimated based on the deficit in lung function. For this reason, regular follow-up controls are important for those who have been exposed to asbestos or who are suffering from asbestos-related diseases. The frequency of monitoring depends on the type of exposure and disease in question. If symptoms arise prior to a periodic check-up, an examination must be sought immediately.

Occupational follow-up of asbestos demolition workers and those exposed to asbestos

Individuals participating in asbestos demolition work are given an occupational physical examination before beginning the work in question. If such work continues, occupational health care performs a regular check-up at three-year intervals. If an employee changes job, occupational health care provides that person with written follow-up instructions for submission to the next care provider.

Employers must submit an annual report to the national ASA register on any employees subject to asbestos exposure. The ASA register is maintained in order to monitor those who have been occupationally exposed to carcinogenic agents or processes, as well as for illness prevention and research promotion.

It is recommended that those with previous exposure attend regular physical examinations. Occupational health care must follow up on exposed employees every three years, providing instructions on the follow-up of employees who are leaving, for submission to the next care provider.

Post-occupational follow-up of people exposed to asbestos or suffering from the related diseases

A decades-long delay occurs between exposure to asbestos and appearance of the resulting diseases. Regular, post-occupational checkups are therefore required.

Subsequent to working life, monitoring is shifted to the person’s health care centre or own doctor. People who have been exposed to asbestos must organise their own follow-ups. It is important that people ensure that they know how to manage the monitoring of their own condition.

It is recommended that occupational healthcare services advise people who have been exposed to asbestos and provide care providers with written follow-up instructions. Frequency of monitoring depends on the type of exposure and disease in question.

Periodic post-occupational check-ups on asbestos exposure are arranged in accordance with a doctor’s examination and directions.

Most asymptomatic cases or those in whom no changes occur are given a periodic check-up at their own health centre every three years. In addition to a general medical inspection, depending on the situation a lung x-ray and lung function tests such as spirometry may be given. If no changes appear after three check-ups, the follow-up interval can be extended to five years.

If no asbestos-induced changes appear within 30 years of the exposure, the follow-ups can be halted. No monitoring is required in cases of mild exposure with no risk of asbestosis.

People suffering from asbestos-related diseases are monitored at occupational or pulmonary clinics at three-year intervals. Computed tomography may be used to support the follow-up of such patients. A care provider can also consult Pneumoconiosis Expert Group in university hospital.

If, during a follow-up, it becomes clear that an asbestos-related disease has not progressed, the doctor can transfer follow-up to a health centre or the person’s own doctor. There is no medical basis for following up on people with low exposure to asbestos and who have pleural plaques.

Follow-up cards for the asbestos-exposed can be found at the end of the guide. You should take this guide to the medical practice you are attending and ask the health care professionals there to fill out the card and provide you with advice on your subsequent visits.

Identifying an occupational disease

An occupational disease is a disease that mainly originates from a physical, chemical (such as asbestos) or biological work-related factor. In the case of asbestos, causality is determined based on the extent and length of the exposure and the type of disease.

Employment history must be clarified

If it is suspected that the symptoms are due to previous exposure, a discussion on the issue must be held with the medical practice handling the case. The doctor will evaluate the amount of exposure involved and perform the examinations necessary to identifying the probable cause of the symptoms.

If the doctor suspects that an occupational disease is in question, he or she will draw up medical certificate E for an insurance company. This certificate will be sent to the insurance company engaged in workplace in which the worker was most recently exposed to asbestos. The doctor should also inform the Regional State Administrative Agency (AVI) of a suspected or diagnosed occupational disease.

In addition to the medical certificate E, the insurance company requires a report of the employment history and asbestos exposure of the worker in question. Such a report can be drawn up using an asbestos exposure form provided by the Finnish Institute of Occupational Health (www.ttl.ifi). If needed, a list of the person’s workplaces can be requested from the Finnish Centre for Pensions (www.tyolelake.fi). Assistance can be requested from a social worker, or an occupational health care or occupational clinic, in clarifying the person’s employment history and asbestos exposure.

Compensation will be paid for any medical examinations deemed reasonable and necessary to the evaluation of an occupational disease, even if it is not proven that an occupational disease is in question. The prerequisite for such compensability is that grounds exist for suspecting that an occupational disease is in question.

When an occupational disease is diagnosed

The insurance company will send a written decision on the status of the occupational disease. This decision will include the date on which the occupational disease appeared and details on any compensation to be paid.

The date of appearance of the disease is considered that on which a doctor was first consulted on the matter and tests were performed with respect to the disease in question. For instance, such a date could be the date of the first lung x-ray or similar examination.

What to do when you suspect that an occupational disease is in question?

1. Clarify whether the disease can be compensated for as an occupational disease (occupational exposure to asbestos).

2. Ensure that an adequate medical examination is performed and a precise exposure report is drawn up, for example in a university hospital or by the Finnish Institute of Occupational Health, in order to confirm whether an occupational disease is in question.

3. Deliver the electronic medical certificate and employment history report to the insurance company.

4. The decision made on this matter by the insurance company is subject to a right of appeal.
Once the decision has been issued, the insurance company can be contacted if you require further information. The decision is also open to a right of appeal. Instructions on drawing up an appeal will be provided as an attachment to the decision. If necessary, you can also contact your trade union or shop steward.

Compensation for asbestos-induced diseases is paid in accordance with the Employment Accidents Insurance Act. In some cases, additional compensation may be applied for on the basis of other laws. According to the Employment Accidents Insurance Act, health care and examination fees, rehabilitation, daily allowance, handicap allowance, accident pension as well as survivor's pension and funeral allowance are payable as compensation. Health care costs, with no limit in time or value, are paid while the need for treatment remains.

Loss of earnings can be reimbursed as daily allowance for a year from the manifestation of the occupational disease. Following this, loss of earnings can be reimbursed in the form of an accident pension. However, the worker in question is often retired when the symptoms of an asbestos-induced occupational disease first appear.

The disability fee is determined according to the degree of disability

A disability fee is tax-free compensation paid for a general, permanent disability caused by an occupational disease. The disabilities liable for such compensation are distributed between 20 degrees of disability, of which the 20th degree is the highest. The degree of disability is a way of quantifying any medical disability of greater severity than reduced working capacity.

The amount of disability fee is determined according to the degree of disability and the age of the patient. Payment of the disability fee begins from the date on which the occupational disease appears.

A disability fee can be paid in the form of one-off or continuous compensation. As an exception, in the case of asbestos-related cancer a disability fee is always paid at the outset as one-off compensation for the 10th degree of disability, and then on a monthly basis, in accordance with the degree of disability, if the severity of the disability exceeds the 10th degree.

Since plaques do not lead to a significant reduction in lung function, they are not subject to a disability fee.

In cases of death, funeral allowance and a survivor’s pension is also paid if the occupational disease is diagnosed only during the autopsy. No other compensation can be received for an occupational disease diagnosed post mortem, unless the issue was previously handled by an insurance company.

Additional information on applying for allowances and compensation, as well as on decision-making policies of insurance companies, is provided on the webpage of the Ministry of Social Affairs and Health: www.stm.fi/vakuutuslaakarit

Rehabilitation and sick leave

Patients can also be entitled to rehabilitation under the Employment Accidents Insurance Act. Patients can apply for the compensation of rehabilitation fees via the insurance company paying compensation for the occupational disease in question. Rehabilitation fees are recompensed by the insurance company in question as a form of financial obligation.

Holiday organisations provide and partly compensate for holidays for people who have been exposed to asbestos or who have asbestos-related diseases. During such holidays, patients seek rest and recreation and can meet other individuals with the same disease. Further information on these holidays can be requested from the Organisation for Respiratory Health in Finland.

Follow-up card for those exposed to asbestos

Medical follow-up is important to preventing the exacerbation of asbestos exposure and asbestos-induced disease, as well as monitoring the resulting disabilities. Once an asbestos-exposed person has left working life, he or she is personally responsible for organising follow-up visits. Instructions on how to proceed next are issued during the final visit to occupational healthcare. If you are retired when this issue arises, book an appointment with your own health centre or doctor.

You can complete the basic information in the follow-up card and ask your doctor or other personnel for assistance in doing so. The doctor will complete the follow-up section. Keep the follow-up card safe and bring it with you when visiting healthcare services on asbestos exposure-related issues.

BASIC INFORMATION

Name ____________________________ Identity number _________________________

Latest employer in whose service the exposure occurred

Profession at the time ____________________________

Last year of exposure ____________________________

Estimated total asbestos exposure ____________________________

Your own estimation => mild moderate severe

Doctor’s estimation => mild moderate severe

Has the occupational disease been diagnosed? Yes _______ No _______

Year of diagnosis of the occupational disease ____________________________

Insurance company ____________________________

Accident code ____________________________

Follow-up visit every third _____ every fifth _____ every _____ year

Additional information on the exposure/disease is available from (contact information of occupational health care, health centre or hospital)

Smoking never _______ yes, daily _____ quit, year ______

Other respiratory diseases ____________________________

Medication ____________________________

Assistive tools in use (e.g. oxygen concentrator) ____________________________

Guide expert: MD, Head Physician, Adjunct Professor Panu Oksa. The guide was developed by the Asbestos Work Group, which – in addition to the Organisation for Respiratory Health in Finland – includes representatives of the Finnish Metalworkers’ Union, the Finnish Electrical Workers’ Union, the Finnish Paper Workers’ Union, The Finnish Construction Trade Union, The Central Organisation of Finnish Trade Unions or SAK and the Finnish Officials’ Organisation or STTK.

Guide for People Exposed to Asbestos and Those Suffering from the Related Diseases

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**Date of follow-up visit** __/__/____

**Place** __________________________________________________________

**Address/phone number** __________________________________________

**Doctor** ___________________________________________ stamp _______________________________

**Clinical examination and observations**
_____________________________________________________________________________________________
_____________________________________________________________________________________________

**Lung X-ray** [thorax] ________date, finding _______________________________________________________

**Comparison to the previous examination**
_____________________________________________________________________________________________

**Lung function examination**

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<th>Spirometry</th>
<th>FVC</th>
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**Comparison to the previous results**

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**Other examinations** (e.g. diffusion capacity DLCO)
_____________________________________________________________________________________________
_____________________________________________________________________________________________

**Follow-up action** [Medical certificate E for insurance company, referral for further examination...]
_____________________________________________________________________________________________
_____________________________________________________________________________________________

**Next follow-up visit**

Date _______________ Contact number for booking an appointment ______________________________

Place __________________________________________________________
TO BE FILLED IN BY HEALTH CARE

Date of follow-up visit ______/____ 2____

Place ____________________________________________

Address/phone number __________________________________________

Doctor ___________________________ stamp __________________________

Clinical examination and observations
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_____________________________________________________________________________________________
_____________________________________________________________________________________________

Next follow-up visit
Date ______________ Contact number for booking an appointment _____________________________

Place ____________________________________________
Join the action – you will receive information, support and tips on everyday living

If you join the Organisation for Respiratory Health in Finland, you will gain information, support and new friends. You will meet other people in the same situation, either online or in peer groups. You can also have an impact on issues related to respiratory diseases and become involved in important health promotion work. As a member, you will gain access to the services of the local respiratory union and the Organisation for Respiratory Health in Finland.

Participate at www.hengitysliitto.fi
or order a membership form by calling the Organisation for Respiratory Health in Finland, tel: 020 757 5000

Hengitysliitto

The Organisation for Respiratory Health in Finland seeks to promote respiratory health and quality of life among people with respiratory diseases.

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