Report of Elimination of Asbestos-Related Diseases

ICOH Mid-Term Meeting
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Helsinki, Finland
Questionnaire Survey on maintaining, demolishing and removing asbestos-containing materials:
Present status reports from ICOH national representatives and country members
under the national programmes for eliminating asbestos-related respiratory diseases

Drafted on 16 December 2013, by Yuki, Chair, Working Group on Prevention of ARD

Background and purpose

The works will remain or expand to be at risk in countries and nations, irrespective of total and universal ban of all types of asbestos and in situations under partial ban of blue and brown asbestos. For instance, occupational exposures to asbestos will persist due to the continued presence of asbestos from prior use in building materials and durable machinery/equipment. Workers who carry out maintenance, demolition and removal of asbestos-containing materials will thus continue to be at risk.

Therefore a set of protective measures must be implemented to optimize effective prevention. All physicians and occupational personnel shall continue to make efforts to reduce the asbestos exposure risk in these works, e.g. maintenance, demolition and removal, as much as possible as the primary prevention.

And as to the secondary and tertiary prevention activities in these works, the ICOH members shall engage in training occupational health professionals and workers, and in supporting comprehensive national efforts on eliminating asbestos-related diseases. The questionnaire hereby is aimed at helping the ICOH members for each country to know about the situations in the primary, secondary and tertiary prevention activities among workers for maintenance, and demolition and removal of asbestos-containing materials according to the national programmes for eliminating asbestos-related diseases. Through this questionnaire, the ICOH members come to learn what have been done and what is not done, and to think of the priority in actions to take in order to follow the ICOH Statement.

Subjects

All ICOH national representatives, if countries do not have each national representative, ICOH country members are contacted and subjected.

Method

The questionnaire in the below is distributed in the half year within 2014 and within the rest half year of 2014, after collected, it is analyzed. The result in a simple described statistics is presented at Seoul ICOH in May, 2015.

Questionnaire
Demographics
Gender [ M, F]
Age [10s, 20s, 30s, 40s, 50s, 60s, 70s ]
Country [ ]
Field [Occupational Hygiene, Occupational Nursing, Occupational Medicine, Human Ergonomics, Social Psychology, Personnel Management and Administration, Social Sciences, if others, please specify.]
ICOH Membership Carrier [ <5-y. 5-y=< <10-y. 10-y=< <20-y, 20-y=<,]
National representative carrier [ <5-y. 5-y=< <10-y. 10-y=< <20-y, 20-y=<,]

Check List No. 1 [Yes, No]
Our country has a total ban of asbestos of all forms including chrysotile for production, use, transportation, and mine/sell/export.

No. 2 [Yes, No]
Our country have reference exposure limits i.e., threshold limit values or occupational exposure limits, adherent to international norms.

Check List No. 3 [Yes, No]
Our country recognizes and gets registered currently asbestos-exposed industries, companies and employers/employees precisely.

Check List No. 4 [Yes, No]
Our country gets registered previously asbestos-exposed industries, companies and employers/employees.

Check List No. 4 [Yes, No]
Our country gets registered workers with asbestos-related diseases and/or previous burden of asbestos exposure.

No. 5 [Yes, No]
Our country have overall good compliance with these limits, as shown in the monitoring results, by means of controlling the exposure to asbestos fibre.

No. 6 [Yes, No]
Our country informs asbestos-exposed workers about the working conditions and asbestos-related hazards.

No. 7 [Yes, No]
Our country provides workers with appropriate respirators, training for their proper use, e.g. fitting, replacement filters, and conditions for maintenance and storage.

No. 8 [Yes, No]
Our country have licensed/authorized demolish industries who can comply with the required exposure levels of ambient asbestos at the boundary of demolish sites and with the safe handling of asbestos-contaminated waste.

No. 9 [Yes, No]
Our country provides workers currently exposed and previously exposed to asbestos with smoking cessation programmes.

Future Plan

There have been some comments, as in the below, from WG members, i.e. Ken and Sverre. Therefore we are going to revise the current questionnaire and relevant procedures. Comments from the Board are also very much welcomed.

Comments from WG members

1. Ken ktaka@med.uoeh-u.ac.jp 2013/10/14 19:26
   Your intent is well taken. However I have identified much room for improvement, hence inserted my comments in the attached.
   Major points:
   1) Oftentimes, National Secretaries would not be knowledgeable about asbestos issues, in which case ICOH-NS should instead serve as a mediator to appoint the appropriate responding person. It should be stated as such.
   2) The questionnaire, as it stands, has not been designed to allow easy response. It should be given the appropriate design and format, which is currently lacking. Here I mean, there should be columns (boxes, underlines, ...) for the respondent to fill in, specific instructions on whether to circle the choice or underline, what does "y" mean? "year" is not regarded as self-obvious in a questionnaire etc., etc.
   3) All are yes/no questions. I don't think collecting categorical (binomial) information for just 9 questions would produce meaningful data. Even if you wanted to make it simple, the questionnaire should allow for the respondent to freely describe or complement the chosen answer.
   4) In particular, questions #6 and #7 are unclear, when you state, "Our country informs (#6)... or our country provides (#7), because it can be either a matter of legal stipulation or implementation. If you mean the former (because it is usually difficult to assess implementation), then it should be rephrased as such.

2. Sverre slangard@ous-hf.no 2013/10/15 16:08
I also thank you for your initiative concerning such a questionnaire. However, I fully agree with Ken as to his comments.

   For the purpose of establishing a method to identify previously asbestos-exposed subjects we carried out a major screening programme of the general male population in one province during the mid 1980s (references below); a four page questionnaire on "complete" work- and exposure histories as well as chest X-ray. We identified thousands previously exposed and could estimate the subjects á priori risk of developing asbestos-related cancers.
on the basis of the compiled information on exposures - including smoking habits. We also calculated - based on the asbestos use in this province compared to lower use of asbestos in other provinces - that about 200.000 males in the country had been "significantly" exposed. (The total population of the country at the time being 4,5 mill).

My intention was that the whole country could be screened in similar manners. However, there was much resistance against such a programme - which would identify subjects in the general population at elevated cancer risks. Personally I meant that we could establish a "risk-based intervention programme" (counseling and screening of those with current (lung cancer) risks exceeding a certain calculated level) from which those at identified elevated risk could profit. However, others meant that such a programme would require too many resources - hence being unrealistic.

In this country - 30-35 years after we stopped using asbestos, hence the population at (asbestos) risk being reduced to some 75.000 subjects - a programme like this may not be versatile any more. I could possibly be versatile in developed countries that have stopped using asbestos quite recently. However, a number of ethical issues have to be considered prior to starting identification of previously exposed as well as before implementing such a programme. If not having a comprehensive and continuous prevention programme to offer those identified as previously exposed, identification of exposed may not be the right thing to do.

References:
Appendix

Text of the ICOH Statement


The International Commission on Occupational Health (ICOH) calls for a global ban on the mining, sale and use of all forms of asbestos and the elimination of asbestos-related diseases. To accomplish the elimination of asbestos-related diseases, we urge each and every individual country to implement a total ban on production and use of asbestos. We also urge complementary efforts aimed at primary, secondary and tertiary prevention of asbestos-related diseases through country-specific “National Programmes for Elimination of Asbestos-Related Diseases” in line with ILO and WHO guidelines.

Malignant asbestos-related diseases include lung cancer, mesothelioma and cancers of the ovary and larynx.¹ There is sufficient evidence that amphibole asbestos (e.g., crocidolite) and serpentine asbestos (e.g., chrysotile) both cause malignancies of the lung, pleura and peritoneum.¹ Non-malignant asbestos-related diseases include asbestosis and pleural abnormalities such as pleural thickening, pleural calcification and pleural effusion.²

International consensus has recommended that a total ban on production and use of all forms of asbestos is the best way to eliminate the occurrence of asbestos-related diseases. In 2006 WHO stated that the most efficient way to eliminate asbestos-related diseases is to stop using all types of asbestos.³ The ILO Resolution on Asbestos, 2006, calls for eliminating the use of asbestos and identifying and properly managing asbestos currently in place as the most effective means to protect workers from asbestos and to prevent future asbestos-related diseases and deaths.⁴ By government decision, a number of countries have already adopted a universal ban on all types of asbestos based on the recognition of the substantial human and economic burden of diseases caused by asbestos. Some other countries have banned the use of amphibole asbestos, predominantly crocidolite, but have not banned the use of chrysotile. As there is sufficient evidence by the International Agency on Research on Cancer (IARC 2012) that chrysotile causes malignancies of the lung, pleura and peritoneum, amphibole-only bans are inadequate; asbestos bans need to include chrysotile as well.

Some countries have banned the production and/or use of asbestos-containing industrial products, but have continued to mine, sell and export asbestos. This is an unacceptable policy and should be reconsidered by those countries. In order to be effective, a total ban on production, use and export of all forms of asbestos should be achieved in every country.

Even after a total ban on production and use of asbestos is achieved, occupational exposures to asbestos will persist due to the continued presence of asbestos from prior use in building materials and durable machinery/equipment. Workers who carry out maintenance, demolition and removal of asbestos-containing materials will thus continue to be at risk. Therefore a set of protective measures must be implemented to optimize effective prevention. The adoption of a total ban on all use of asbestos and products, equipment and materials containing asbestos implies a need to follow up the implementation of the ban with supplementary regulations and national programmes for ensuring the elimination of all use of asbestos and the required protection from exposure to asbestos. This includes, as appropriate, the review of legislation and regulatory systems regarding trade and the
Primary prevention involves ensuring control of exposures to airborne asbestos fibres, monitoring concentrations according to established standards and reporting exposure levels to appropriate authorities. There is no exposure level below which asbestos-related disease risk can be totally eliminated. To minimize asbestos exposure, reference exposure limits (i.e., threshold limit values or occupational exposure limits) should adhere to international norms. Complying with these limits will reduce, but not totally eliminate, the risk of asbestos-related diseases. Exposed workers should be informed about their working conditions and associated hazards, and provided with appropriate respirators. While respirators should not be relied upon as the sole means of routinely limiting exposure to asbestos fibres, workers provided with them should be trained for their proper use, and encouraged to wear them when warranted. Adequate fitting, changing of filters, sanitary storage and maintenance of respirators are also required for optimal protection. Licensing or authorization procedures need to be considered to ensure safe handling repair, maintenance and demolishing operations. Ambient air levels at the boundary of demolition sites adjacent to residential areas should be strictly monitored and kept below the required exposure levels. Proper and safe handling of asbestos-contaminated waste is essential. Finally, in view of the synergistic effect of smoking and asbestos exposure on lung cancer risk, smoking cessation programmes are essential for all workers currently and previously exposed to asbestos.

Secondary prevention includes medical monitoring of exposed workers, early diagnosis and treatment to prevent disease progression. Secondary prevention is not effective for mesothelioma and is not yet proven to be effective for lung cancer among asbestos exposed workers, but workers identified with early asbestosis can be transferred away from further exposure with the intent of slowing progression of their disease. Malignant and non-malignant asbestos-related diseases can be diagnosed according to established guidelines.\textsuperscript{2,5}

Tertiary prevention includes medical intervention and public health services to limit disease-related disability and help workers affected by asbestos-related diseases to cope with chronic effects of their disease. Appropriate medical care and rehabilitation for the diseases and their potential complications, including immunization against pulmonary infections, should be provided. After disability and impairment evaluation, just compensation and disability benefits should also be provided, as warranted.

Individuals with asbestos-related diseases should be reported to authorities and public health registries. Public health surveillance of asbestos-related diseases, in particular malignant mesothelioma, asbestosis and pleural abnormalities, can help track progress towards eliminating asbestos-related diseases and may identify where further primary prevention efforts are needed. Public health surveillance of reported exposure levels can also be used to target enhanced primary prevention.

Achieving a worldwide ban on the mining, sale and use of all forms of asbestos and the elimination of asbestos-related diseases will require that physicians and occupational health personnel responsibly and persistently express their concerns, raise awareness and take necessary action regarding the need to prevent asbestos-related diseases. Recognizing the urgent need for coordinated actions, ICOH will continue to foster
global and national collaboration in this endeavour, promoting the engagement of ICOH members in training occupational medicine and health professionals in competencies needed to support comprehensive national efforts to eliminate asbestos-related diseases.

References