Asbestos: Common Questions and Answers

1. What is asbestos?
Asbestos is the name given to a group of minerals that occur naturally as masses of strong, flexible fibres that can be separated into thin threads and woven threads. These fibres are not affected by heat or chemicals and do not conduct electricity. For these reasons, asbestos has been widely used in many industries. Four types of asbestos have been commonly used:

- chrysolite, or white asbestos (curly, flexible white fibres), which accounts for about 90 per cent of the asbestos being used in the industry;
- amosite (straight, brittle fibres that are light grey to pale brown in color);
- crocidolite, or blue asbestos (straight blue fibres); and
- anthophyllite (brittle white fibres).

2. How is asbestos used?
Asbestos has been mined and used commercially in North America since the late 1800s, but its use increased greatly during World War II. Since then, it has been used in many industries. For example, the building and shipbuilding industry uses it for strengthening cement and plastics as well as for insulation, fireproofing and sound absorption. The shipbuilding industry has used asbestos to insulate boilers, steam pipes, hot water pipes and nuclear reactors in ships. The automotive industry uses asbestos in vehicle brake shoes and clutch pads. More than 5,000 products contain or have contained asbestos, some of which are:

- asbestos cement sheet and pipe products used for water supply and sewage piping, roofing and siding;
- casings for electrical wires, fire protection material, chemical tanks, electrical switchboards and components;
- residential and industrial building materials;
- friction products, such as clutch facings, brake linings for automobiles, railroad cars, airplanes and industrial friction material;
products containing asbestos paper such as table pads and heat-protective mats, heat and electrical wire insulation, industrial filters for beverages, small appliance components and underlying material for sheet flooring;

- asbestos textile products, such as packing components, roofing materials, heat and fire resistant clothing, fireproof draperies; and

- other products including ceiling and floor tile, gaskets and packing, paints, coatings, sealants, caulking tape, patching tape and plastics.

In the late 1970’s, the US Consumer Product Safety Commission banned the use of asbestos in wallboard patching compounds and gas fireplaces because these products released excessive amounts of asbestos fibres into the environment. In addition, asbestos was voluntarily withdrawn by manufacturers of electric hair dryers.

3. Why is the Regina Qu’Appelle Health Region (RQHR) taking this action?
In 2010, RQHR and its Affiliates commissioned industry asbestos experts to do an audit of all health facilities in the region which may have asbestos to ensure complete and consistent documentation. Friable asbestos which is exposed and may become airborne, can be a health risk. RQHR wanted to be proactive and comprehensive in ensuring safety.

4. What did the audit find?
The audit found some facilities that had friable asbestos in a condition with a potential to become airborne, if disturbed. Friable asbestos in this condition has been removed or contained.

5. Is there any risk to the public, patients or families of being exposed to friable asbestos?
There is no substantial health risk to this. Almost all asbestos is contained within walls, ceilings and floors and presents no significant health risk. Friable asbestos found in poor condition was not located in public or patient areas.
6. What about tradespeople and maintenance staff?
When walls, ceiling and floors are opened or exposed, there is a risk to the tradesperson, maintenance or housekeeping staff who work in those areas; however, if those workers are wearing protective equipment and following Saskatchewan Occupational Health and Safety (OHS) regulations, there is no significant health risk for them.

7. What is RQHR doing?
Through a news release and memo to staff, we are making the results of the latest inspection available and offering additional information on asbestos, including a toll-free information phone line: 1-855-215-5553.

8. Who is at risk?
In the Regina Qu’Appelle Health Region, maintenance, housekeeping and external tradespeople are most likely to come into contact with asbestos-containing materials. This includes people who were involved in the following ‘asbestos processes’:

- the sawing, cutting or sanding of asbestos-containing materials;
- the repair of, maintenance, replacement or removal of asbestos surfaces;
- the cleaning or disposal of asbestos materials;
- the mixing or application of asbestos shorts, cements, grouts, putties or similar compounds;
- the storing or conveyance of materials containing asbestos; and
- the demolition of structures containing asbestos.

People who performed ‘asbestos processes’ without wearing approved protective clothing and who wore their contaminated work clothes home, for laundering for example, may have exposed household members to airborne asbestos.

9. How great is the risk?
Asbestos that is bonded into finished products such as walls, tiles and pipes poses no significant health risk as long as it is not damaged or disturbed (for example, by sawing or drilling) in such a way as to release fibres into the air. Asbestos is only dangerous when it is airborne in spaces where people can breathe in fibres. Asbestos containing material that can be crushed in the hand...
is called friable and can release fibres into the air if disturbed. Once these nearly indestructible fibres are inhaled or work their way into body tissues, they tend to stay there indefinitely.

The risk of developing asbestos-related disease varies with the type of industry in which the exposure occurred and with the extent of the exposure. In addition, different types of asbestos fibres may be associated with different health risks. For example, results of several studies suggest that crocidolite and amosite are more likely than chrysotile to cause lung cancer, asbestosis and in particular mesothelioma. Even so, no fibre type can be considered harmless and proper safety precautions should always be taken by people working with asbestos.

Since the 1960’s, it has been known that asbestos fibres are a potential cancer-causing substance and serious health hazard. Asbestos is highly regulated by the Saskatchewan Occupational Health and Safety Act (1993) and Regulations (1996), which dedicate 16 sections in six pages (Part XXIII) to the material. These regulations describe typical asbestos works as high, moderate or low risk.

10. What factors affect the risk of developing an asbestos-related disease?
Several factors can help to determine if asbestos exposure affects an individual, including:

- dose (how much asbestos an individual was exposed to);
- duration (how long an individual was exposed);
- size, shape and chemical makeup of the asbestos fibres;
- source of the exposure; and
- individual risk factors, such as smoking or pre-existing lung disease.

11. What are the health hazards of exposure to asbestos?
Fifteen to 45 years after exposure, the inhalation of asbestos may increase the risk of developing several serious diseases, such as:

- asbestosis, a chronic lung ailment that can produce shortness of breath, permanent lung damage and increase the risk of dangerous lung infections;
- mesothelioma, a rare cancer of the thin membranes that line the chest and abdomen;
- lung cancer;
• pneumoconiosis; and
• other cancers, such as those of the larynx and of the gastrointestinal tract.

The risk of injury to health caused by the inhalation of asbestos is increased by smoking.

12. How does smoking affect risk?
Many studies have shown that the combination of smoking and asbestos exposure is particularly hazardous. Cigarette smokers, on average, are ten times as likely to develop lung cancer as non-smokers. For non-smokers who work with asbestos, the risk is about five times greater than for those in the general population. By contrast, smokers who also are heavily exposed to asbestos are as much as ninety times more likely to develop lung cancer than are non-exposed individuals who do not smoke. Smoking does not seem to increase the risk of mesothelioma, however.

There is evidence that quitting smoking will reduce the risk of lung cancer among asbestos-exposed workers, perhaps by as much as half or more after at least five years without smoking. People who were exposed to asbestos on the job at any time during their life or who suspect they may have been exposed should not smoke. If they smoke, they should stop.

13. How can workers protect themselves?
Employers are required to follow regulations dealing with asbestos exposure on the job under the Saskatchewan Occupational Health and Safety Act and Regulations. Training is also provided. Workers are required to use all protective equipment provided by their employers and follow recommended work practices and safety procedures if working directly with asbestos.

14. What can people who have been exposed to asbestos do?
• Stop smoking.
• Get regular health checkups.
• Get prompt medical attention for any respiratory illness.
• Use all protective equipment, work practices and safety procedures designed for working around asbestos.
15. Are there other sources of exposure from products contaminated with asbestos particles?
Asbestos is so widely used that the entire population has been exposed to some degree. Air, beverages, drinking water, food, drug and dental preparations, and a variety of consumer products all may contain small amounts of asbestos. In addition, asbestos fibres are released into the environment from natural deposits in the earth and as a result of wear and deterioration of asbestos products (i.e. brake dust from automobiles).

16. What is the Regina Qu’Appelle Health Region doing to ensure that no one is exposed to risk from hazardous levels of friable asbestos?
The Regina Qu’Appelle Health Region and its affiliates have implemented a co-ordinated and consistent Region-wide approach to asbestos management. While the ideal goal for the Region and its affiliates would be to remove all asbestos, it is important to remember that unless asbestos is disturbed and becomes airborne in occupied spaces, or migrates to occupied spaces, there is no significant health hazard. The friable asbestos in a condition that may become airborne, if disturbed, has been removed or safely contained in an orderly fashion. Asbestos material that is well contained and unlikely to be disturbed may stay in place indefinitely.

17. Are areas with friable asbestos identified?
Saskatchewan Labour’s Occupational Health and Safety Act includes regulations governing how to safely work with and around asbestos. This includes a full inventory of all asbestos-containing sites. These sites are marked with labels, which are placed on the door frame of all affected areas. Materials such as pipes are clearly marked with larger labels or stenciled letters. All friable asbestos materials are subject to regular inspection.

18. Which RQHR/affiliate facilities contain asbestos containing materials?
Any building constructed prior to 1985 may be assumed to contain asbestos. The most recent asbestos inspection reports, including a quick-reference list of all facilities, can be accessed at www.rqhealth.ca/programs/asbestos/index.shtml.
19. How is the Regina Qu’Appelle Health Region identifying and prioritizing the safe removal/containment of asbestos-containing materials?
RQHR is following OHS regulations in identifying and containing asbestos. All friable asbestos with the potential to become airborne has now been removed or contained by qualified contractors. Those areas still containing friable asbestos will be monitored and will undergo an annual inspection.

20. If the audit report was done in 2010, why are we being notified now?
After the report was received, our first priority was to develop a plan to remove or contain any friable asbestos, which posed a potential hazard in a safe, timely manner. Staff members at affected facilities were also informed at that time. We also consulted with a number of internal and external experts to develop a strategy for ongoing management.

21. Do I need asbestos safety training?
Only staff required to work with asbestos containing materials require asbestos process training. General awareness training is available to all staff and has been provided at facilities prior to remediation.

22. Is there an RQHR/Affiliate policy and procedure for managing and working with asbestos containing materials?
We are currently developing a policy and procedure for working with asbestos-containing materials, which forms part of our ongoing asbestos management program. Affiliate health facilities are part of this process.

23. How do I know if I have been exposed to asbestos at work?
If you performed an ‘asbestos process’ (see question 8) in an area where you suspect there were asbestos-containing materials, without the use of personal protective equipment, you may have had an exposure to asbestos.
24. What do I need to do if I think I may have been exposed to asbestos, while working for the RQHR or one of its Affiliates?

Please contact the toll-free line we have established: 1-855-215-5553 and follow the prompts.