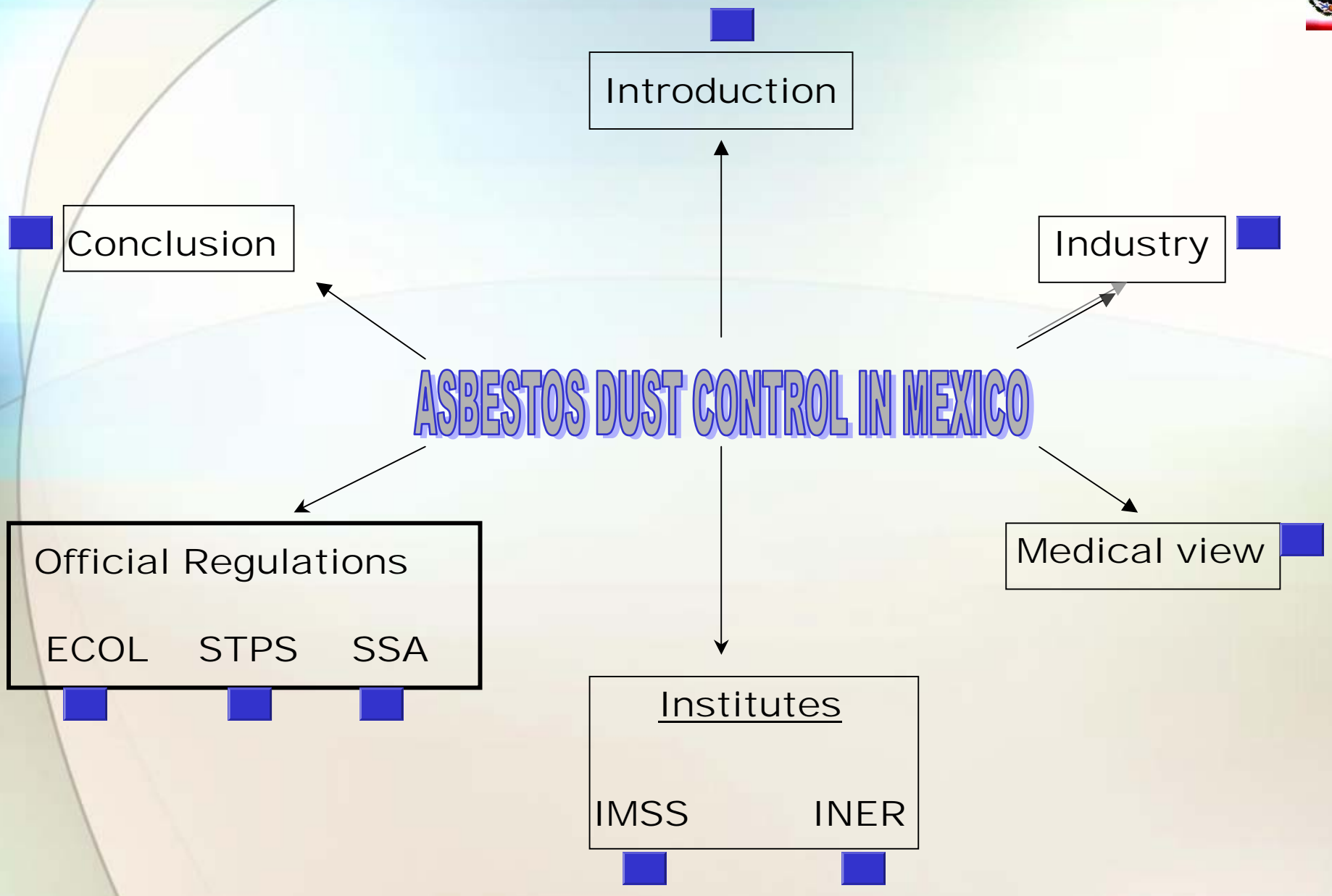


ASBESTOS IN MEXICO



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ASBESTOS DUST CONTROL IN MEXICO



INTRODUCTION

Asbestos in México are used in several products, such as construction materials and the car brakes, in order to resist heat and corrosion. The asbestos includes the crisotilo, the amosita, the crocidolita, the tremolita, antofilito, actinolita as well as any of these materials that have been treated or modified chemically.

Mexico does not produce Asbestos, all of them is Imported from other countries





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ASBESTOS INDUSTRY

- ❖ Manufacture of asbestos cement and its products; it includes sheets, pipelines and connections of asbestos cement and fabric of thread of asbestos;
- ❖ Autodivide transport made with asbestos; including clutch, brakes and joins, are made with asbestos
- ❖ Manufacture of protection clothes for fire and heat,
- ❖ Manufacture of other products that use asbestos for its elaboration.



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Asbestos is very high resistance fiber to fire, and is used:

- ***Fabricate laminates***
- ***Roofing tiles***
- ***Waterproofs***
- ***Packages***
- ***Gloves***
- ***Car brakes.***

Companies arrived to Mexico because of millionaire issues of health damage of workers, of the others countries.



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- *In 1970, there was a great development of the companies*
- *Manufactureres of asbestos products, like roofs, clothes, asphalt.*
- *In United States, the asbestos products were forbidden, and all the companies, move into México because of NAFTA.*

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MEXICO does not produce asbestos

It, is imported from:

CANADA

BRAZIL

SOUTH AFRICA.

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- *The United States stopped making asbestos products because it causes pleural cancer*



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- *In Mexico there is not only one case where a company has been closed for demands for better health conditions at work*
- *This case indicates that in 1998 dismissed workers of a factory of car breaks presented a demand to the National Administrative Office created as part of the Parallel Agreements of the NAFTA*



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Companies has transfered to third world class countries, where legislation has no surveillance about safe management of toxic materials. Mexico has become in one of the main assemblers of asbestos originated in Canada and Brasil. The amount of products has triplicate, and more than 60% of it, is exported to U.S'.

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The companies, hired many people, but, the laboral conditions are the worst, because in the most of the companies, they do not give protection equipment to the personnel, and they are hired under unknown time lapse, the largest contract in the companies is for 5 years .





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- ❖ ***The inhalation of fibers of asbestos provoke serious diseases in the lungs and in other organs***
- ❖ ***The asbestosis generate an accumulation of scar tissue in lungs, resulting in the loss of the lung function, the disability and death***
- ❖ ***The fibers of asbestos associated with this type of risks are too small to be perceived to simple sight and smokers have a major risk of developing certain diseases associated with the asbestos***
- ❖ ***In this same sense, Mexico does not has reliable statistics, associated with the work***

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The people, make their work without personal protection equipment, and inhales the fibers of asbestos, and very often the people smoke in the work area.

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The result, is an increase of lung cancer in workers of asbestos companies





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Risks for asbestos companies workers

❖ ***The use of asbestos, has become a labor and public health issue, because every year, its effects in the organism provokes millions of deaths***

The workers that are exposed, can develop asbestosis or lung diseases because of the inhalation of asbestos fibers, for example pleural mesotelioma.

❖ ***OIT : every year 2.1 of million workers by pathology died derived from the work***

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•Since 1986, asbestos had been identified as a cancerigen substance by WHO, however, in Mexico, it is a problem that is not identified and also the impact in population is unknown



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- ❖ The Mexican Institute of Social Security (IMSS) did a mortality study in mexican population cused by inhalation of fibers asbestos, and it revealed that there are 800 deaths from 1979 to 2000 caused for pleural mesotelioma, without considering unregistered cases.



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- ❖ ***On the records of the IMSS had analyzed on the occupational diseases, it was found that from 1992 to 2000 there were 211 cases of asbestosis as occupational disease, of which 95 per cent they were men***
- ❖ ***The average of age to the moment of the diagnosis was 49 years.***
- ❖ ***The specialist thinks that the problems prevail in the health system institutes to qualify and to identify the pleural mesotelioma as occupational disease***

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According to estimations realized by the above mentioned Institute, "100 new cases are detected in the country every year, nevertheless, there exists a subregistry of at least three thousand new annual cases, it means 80 per cent of them is linked to the exposure of asbestosis "





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Permissible levels of exposure to asbestos

The exposure of personnel to the asbestos must not exceed 0.1 fiber for cubical centimeter (f/cc) of air divided equally in a period of eight hours. The exposure at short term must not exceed an average of 1 f/cc divided equally in 30 minutes. It is prohibited to rotate personnel to be able to accomplish with the requirements of permissible limits of exhibition.



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**OFFICIAL MEXICAN NORM NOM-125-SSA1-1994.
THAT ESTABLISHES THE SANITARY
REQUIREMENTS FOR THE PROCESS AND USE OF
ASBESTOS.**



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The elaboration of this Official Mexican Norm, is a result of the need to rely on a juridical instrument that should allow the sanitary authority, to prevent damages and to protect the health of the population exposed to fibers of asbestos, as well as to protect the health of the neighboring population to the establishments that they work with fibers of asbestos.

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Being the asbestos a mineral fiber that can provoke damages in health of the exposed population, because of its physical and chemical characteristics , level of concentration and time of exposition, which is capable of contaminating the environment and provoking ASBESTOSIS (neumoconiosis characterized by pulmonary fibrosis) in workers.

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Objective

To establish the sanitary requirements that must fulfill the industrial establishments dedicated to the assemble of the asbestos, to protect the health of the personnel occupationally exposed to the fibers, as well as to the neighboring population to the establishments.

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3.9 NOM-024-SSA1-1993 environmental Health. Criterion to evaluate the quality of the air environment, with regard to suspended total particles (PST). Permissible value for the concentration of suspended total particles PST in the air environment like protection measurement to the health of the population.

3.10 NOM-025-SSA1-1993 environmental Health. Criterion to evaluate the quality of the air environment, with regard to minor particles of 10 microns (PM10). Permissible value for the concentration of minor particles to 10 microns in the air environment, as protection measurement to the health of the population.



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Determination of measurements of sanitary control **6.1 Obligations of the holders of the establishments.**

6.1.1 To take to end the environmental control and the medical evaluation of the occupationally exposed personnel.

6.1.2 To notify to the Headquarter of Environmental Health and / or to the Delegations of Sanitary Regulation of the State Services of Health of the Health Secretary the operations where the fibers of asbestos are tried and in general in all those processes where fibers of asbestos are in use or manipulate. By means of the fulfillment of the requirements established for the Request of the Sanitary corresponding License.



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Criteria for the alertness of the health of the personnel occupationally exposed

In relation to the paragraphs 5.3, 5.5 and 6.1.1 indicated ones in the present Norm, to preserve the health of the occupationally exposed personnel, the holder of the establishment must do the following actions:

7.1 In the workers again revenue must practice a medical examination in hiring process:

- 7.1.1 To determine the state of health of the aspirants.
- 7.1.2 To identify any factor of risk that constitutes a contraindication to the exposition to fibers and powders of asbestos in suspension in the air.
- 7.1.3 To rely on a process of reference that it should use as support to the posterior periodic medical examinations .





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References

3.1 NOM-010-STPS-1994 Relative to the conditions of hygiene in work centers where they are produced, store or handle chemical substances capable of generating pollution in the environment .

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3.2 NOM-048-STPS-1993 Hygiene labour manufacturer environment, determination of fibers of asbestos suspended in the occupational atmosphere method of microscopy.

3.3 NOM-017-STPS-1993 Relative to the equipment of personal protection for the workers in work centers .

3.4 NOM-021-STPS-1993 Relative to the requirements and characteristics of the reports of the irrigations of work that occur to integrate the statistics.





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Regulation of the General Law of the Ecological balance and the Protection to the Environment as for Record of Emission(Issues) and Pollutants' Transference



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3.6 NOM-052-ECOL-1993 That establishes the characteristics of the dangerous residues, the list of the same ones and the limits that they do to a dangerous residue for its environmental toxicity.

3.7 NOM-007-SCT2-1993 Packages and crates destined for the transport of substances and dangerous residues.

3.8 NOM-003-SCT2-1993 Characteristics of packing labels and crates destined to the transport of substances and dangerous wastes.



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Conclusion:

There are many things to do in Mexico:

- 1.- Accomplish the regulations strictly.
- 2.- Give more capacitation about use of de Personnel Protection Equipment and supply them.
- 3.- Invest in equipment for dust extraction, and other technologies
- 4.- Make clinical exams , laboratory an cabinet exams
- 5.- Search other option to use instead asbestos in order to avoid it.
- 6.- And the most important, apply the actual technologies we are learning, to manage the asbestos industrial use.



Thank you!!