

## Yet another Newsletter

In an era when email groups, newsletters, media reports, e-books to conventional books are proliferating, you would be legitimately wondering why yet another newsletter. But in the context of Occupational and Environmental Health there are either technical journals or sporadic newspaper reporting. And there is very little that is mentioned of the related workers rights. OEHNI which is trying to bring together victims and support organizations and create a platform for dialogue with decision makers needs a medium for exchange and sharing of information – to look for the obvious and not so obvious areas of action. This newsletter aims to fulfill this primary need.

The newsletter is also important from a larger perspective of changes occurring in the global financial architecture. As capital becomes more mobile, the nature of work gets more informalised and unstable. The complexities arising from such rapid changes where factories are



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## Status of Occupational Health in India

India is a vast country with a surface area of about 3.3 million square kms. The total population of India according to 2001 census was 1.025 billion. About 72% of its population lives in the rural area. Emerging occupational health problems are to be tackled along with the existing public health problems like communicable diseases, malnutrition, poor environmental sanitation, and inadequate medical care. Globalization and rapid industrial growth (about 8% annual economic growth) in the past few years have added further to complexities of occupational health related issues.

In size, India is one of the most important developing countries in the world. According to 2001 census, about 40 million people belong to the working population. As per Director General of Factory Advisory Services & Labour Institutes [DGFASLI] there are 300,000 registered industrial factories and more than 36500 hazardous factories employing 2046092 workers. Approximately 10 million persons were employed in various factories. The current burden of accumulated occupational diseases in India is estimated to

be at around 18 million cases.

### Occupational injuries and diseases

The statistics for the overall incidence/prevalence of occupational disease and injuries for the country is not adequately compiled in an easily accessible format. Leigh et al. have estimated an annual incidence of occupational disease between 924,700 and 1,902,300 and 121,000 occupational disease caused deaths in India. Based on the survey of injury incidence in agriculture, a study by Mohan and Patel(1992) in Northern India, an annual incidence of 17 million injuries per year, (2 million moderate to serious) and 53,000 deaths per year in agriculture sector alone was estimated. A report by National Institute of Occupational Health[1999], records more than 3 million people working in various type of mines, ceramics, potteries, foundries, metal grinding, stone crushing, agate grinding, slate pencil industry etc. These workers are occupationally exposed to free silica dust and are at potential risk of developing silicosis.

moved from one place to the other both within and across countries, workers and activists need to understand some of the underlying causes for the workers deteriorating work conditions.

This inaugural issue focuses on some of the dust diseases and reminds us that despite the fact that "Current Science" issue of 1934 drew attention on the prevalence of Silicosis in Kolar Gold Mine Workers; the elaborate mechanisms of the State have failed to address this terminal disease and have been and continue to be grossly unjust to the workers. Perhaps the intervention of the courts could bring in some semblance of fairness in dealing with the diseased and departed workers.

The issue also highlights what is not obvious. All of us think that Silicosis is strictly an occupational disease. Though it is incontrovertible that almost all the occurrence is because of work in the dust prone environment, in a unique study of the cold desert region of Himachal Pradesh, doctors have found that silicosis is prevalent among the people because of the nature of the terrain and the propensity for dust in the environment.

The major occupational diseases/ morbidity of concern in India are: silicosis, musculoskeletal injuries, coal workers' pneumoconiosis, chronic obstructive lung diseases, asbestosis, byssinosis, pesticide poisoning and noise-induced hearing loss. Census figures (2001) have revealed that there is an increase of about 28% male workers and 45% female workers from 1991 to 2001. The male: female working population ratio was 78:22 in 1991, but it has now changed to 68:32 in 2001. This increase in the working female population leads to certain concerns, such as adverse effects on reproductive health, exposure to toxic chemicals in the workplace, musculoskeletal disorders (is the figures other way or women have become less). This concern arises from the fact that neither the tasks nor the equipment they use are adapted to their physique. In addition, female workers have specific stress-related disorders, resulting from job discrimination (such as lower salaries and less decision-making powers), a double burden of work (at workplace and home) and lurking and real threats of sexual harassment.

#### Mining in India

India has been bestowed eminently with large amount of mineral deposits. It has rich mineral resources, contributing more than 1.5 % of India's gross national product (GNP). India has a unique blend of big and small, manual and mechanized, opencast and underground mines. While coal, lignite, iron ore, manganese, bauxite, and limestone form a major part of the mining industry, India is also rich in minerals like copper, lead, zinc, gold, etc. The total workforce of the mining industry in India comprises more than one million workers.

Compared to factories, mining industry has a higher proportion of fatal and nonfatal injuries (almost two to three times more). Chasnala Mines Disaster in 1975 was one of the worst disasters with 431 deaths.

Disaster management is a major problem as remote locations, provision of rescue; first aid and emergency treatment pose a big challenge, especially in smaller mines. The neglect of health and safety, as well as disregard to legislation led to the government intervention in coal industry resulting in the nationalization of the coal industry during 1971–1973. However there has been a continuing neglect on the occupational conditions!

#### Legal provisions and financing

At present, safety and health statutes for regulating Occupational Safety and Health (OSH) of persons at work exist only in four sectors, namely mining, factories, ports, and construction. A number of OSH legislations and regulations are applicable in a fragmented manner and the regulations have very specific objectives to cover the problems of safety and health to a limited extent. The major legal provisions for the protection of health and safety of the working populations are the Factories Act and Mines Act. The Factories Act, 1948, deals with occupational health and safety, as well as welfare of workers employed in a factory. However, more than 90% of the Indian labour force does not work in factories; hence, they fall outside the purview of the Act. Some of these units may be manufacturing, waste handling, using hazardous chemicals or carrying on operations dangerous to the health and safety of workers.

The Factories Act (1948) was amended in 1987 following the Bhopal gas tragedy. A special chapter on occupational health and safety to take care of the workers of hazardous industry was added. Under this chapter, pre-employment and periodic medical examinations and periodic monitoring of the work environment is mandatory for the industries defined as hazardous under the Act. The maximum permissible limit has been laid down for a variety of chemicals. The implementation

agency for the act is the State Factory/ Labour Inspectorates supported by a few industrial hygiene laboratories. There are similar provisions under the Mines Act. The Factories Act is applicable only to factories employing 10 or more workers and it covers only about 10 million workers. Some other legal provisions for the protection of special working groups are

- The Plantation Labour Act, 1951
- Dock Workers (Safety, Health and Welfare) Act, 1986
- Building and other Construction Workers (Regulation and the Employment and Conditions of Service) Act, 1996,
- Beedi and Cigar Workers (Conditions of Employment) Act, 1966
- Child labour (Prohibition and Regulation) Act,
- Insecticides Act, 1968

Legal provisions for mining industry comprise

- Mines Act 1952, and 1955
- Mines Rules, 1957
- Coal mines regulation, 1961
- Metalliferous mines regulation
- 1989 – Oil mines regulation.

Occupational health in India has to compete with primary & curative health for its budget. While 4% of the gross domestic product (GDP) is spent on health care, almost 75% of this is spent on curative health.

## ILO Adopts New List of Occupational Diseases

The Governing Body of the International Labour Organization (ILO) approved a new list of occupational diseases March 25, replacing a list that had been in place since 2002. The list is intended to help countries prevent, record, and, if applicable, compensate for diseases caused by work.

According to ILO, the new list "includes a range of internationally recognized occupational diseases, from illnesses caused by chemical, physical and biological agents to respiratory and skin diseases, musculoskeletal disorders and occupational cancer. Mental and behavioural disorders have for the first time been specifically included in the ILO list. This list also has open items in all the sections dealing with the afore-mentioned diseases. The open items allow the recognition of the occupational origin of diseases not specified in the list if a link is established between exposure to risk factors arising from work activities and the disorders

contracted by the worker."

It was created through consultations with member states, negotiations, analysis of emerging occupational risk factors, examination of countries' current practices in recognizing occupational diseases, and review and revision by tripartite meetings of experts. To be considered for the updated list, there has to be a causal relationship with a specific agent, exposure, or work process; the disease has to occur in connection with the work environment and/or in specific occupations and with a frequency among those workers that exceeds the average incidence in the rest of the population; and there must be scientific evidence of a clearly defined pattern of disease following exposure and plausibility of cause.

"Creating safe and healthy working conditions is a challenge to which the ILO has been responding since it was founded in 1919," said Seiji Machida, director of the ILO's Programme on Safety and Health at Work and the Environment (SafeWork). "As our world develops, with new technologies and new patterns of work, the challenges change and new risks emerge. When safety and health measures are not followed or fail, accidents, injuries, diseases, and even deaths may occur. Victims of workplace injuries and occupational diseases have to be compensated properly and prevention actions at workplace are needed so that similar cases will be prevented. This new list of occupational diseases reflects the state-of-the-art development in the identification and recognition of occupational diseases in the world of today. It indicates clearly where prevention and protection should take place. The world's working population and their families will benefit from this new list."

SafeWork has four major goals:

- preventive policies and programs are developed to protect workers in hazardous occupations and sectors
- effective protection is extended to vulnerable groups of workers falling outside the scope of traditional protective measures
- governments and employers' and workers' organizations are better equipped to address problems of workers' well-being, occupational health promotion, and the quality of working life
- the social and economic impact of improving workers' protection is documented and recognized by policy-makers and decision-makers

## MANDSAUR: Successful model to reduce Silicosis incidence?

MANDSAUR is well known for slate pencil. It is a centre where incidence of silicosis is reported highest (56%) in India. PRIA published a small pro-people booklet introducing the problem in Hindi called "Ghatak Dhul" in 1985. We visited the city on 11 & 12 November, 2009.



was accompanied by Jayesh Parmar our full timer at Khambhat and Habibsha Diwan a silicosis victim. Our local host Vikas and his colleague More joined us and took us to the office of the welfare Board for Silicosis workers. President of the Board was not available and we had to contend with talking to the staff. NIOH carried out its study on Slate Pencil workers and reported high incidence of silicosis during 80s. We were informed that the Board came in existence on November 1, 1985 after MP assembly passed resolution to the effect in 1982 and the Rules framed in 1983. The Board started functioning on 01-01-86. The then Labor Minister Mr.Purohit hailed from Mandasaur and it was he who pushed the matter. The Board started collecting cess from January 1987 and in the first published report it had collected Rs.29 lakh. The Board has permanent staff of 22. Cess at the rate of Rs.4 per 1000 slate pencil is charged from the manufacturer. When the finished good is ready for dispatch, manufacturer has to approach the Board office and make payment. Board has its monitoring centers (Chowky) in the manufacturing areas. Its annual income in 07-08 was little more than Rs.96 lakhs. We were informed that the present President is very dynamic and he took over the reins 5 years ago. After his taking up the post the income has gone up considerably.

Once a worker has been diagnosed as suffering from Silicosis or SilicoTB by the local Medical Board, S/he is registered with the Welfare Board. Local Medical Board is headed by Civil Surgeon in the city. There are usually two more members- both Medical- on the Board. Criterion used by the Medical

Board for diagnosis is Occupational History and X-ray. The Medical Board issues certificate for positive patients. Once the patient submits the Certificate issued to him with the Board, the Welfare Board (Known popularly as Mandal) demands few more documents like certificate by the Employer to the effect that the patient was employed by him and copy of the attendance register, voter card etc. Once satisfied, the Welfare Board registers the patient. Now the registered patient is entitled for 7 different benefits extended by the Welfare Board. All registered patients receive Rs.700 per month towards treatment and medical care. The widows of silicosis victims are entitled for Rs.450 per month and Rs.500 per child. Rs.11, 000 is paid on death of silicosis patient. More over they are entitled for assistance of Rs.5000 in case of marriage of 2 daughters and assistance for education of their children from Rs.650 to 1850. We could meet a victim who was diagnosed in 1999 and since then is getting benefits.

Against the income of Rs.96 lakh the Board spent Rs.33 lakh only in year 07-08. The Welfare Board consists of 11 members appointed by State Govt for the period of three years. Mr.Ajaysnih Chuhan is President. Assistant Commissioner of Labor is Secretary of the Board. Mr. J.S.Udde is Secretary at present. It has 3 representatives each from industry and workers. There are three other members including Chief Medical Officer, Mandasaur, Directorate Industrial Safety & Health Officer and Officer of the district industry center. In financial year 2009-10 there are 146 registered patients who are extended benefits. The figure in 2007-08 was 184. Since 99-2000 this number has steadily gone down from 365 to 146 now. Number of widows receiving benefits in 99-2000 was 174 which steadily went up to 244 in 06-07. The number of families receiving funeral benefit in 99-2000 was 32 (highest figure 37 in year 88-89).This figure has gone down to 28 in 06-07 and 21 in 07-08. These all figures indicate that the silicosis incidence is going down. We need in depth study to cross check with existing situation.

We were further informed by the staff that the units usually employ 5-11 workers and are all small. There are about 15 units which have not registered themselves with the Board and there may be more, we were told.

The District collector has passed instruction to organize Diagnosis camp every six months. Anyone can attend the camp. Even if the worker is employed by the unregistered unit, he can attend the camp and if found positive can take benefits. In the camp organized in 1998, 1509 workers were examined out of which the Board confirmed 199 workers. Since then 15 more camps have been organized till December 2008. After December 06, 696 workers were examined put of which only 10 were confirmed having silica related disease.

**Visit to ESI Local Office:**

Next we visited Local office of the ESI Corporation. We were greeted by the Manager of the local office. We were informed that even if unit employs one worker, the unit can register itself with ESIC. We asked for copy of the amendment but we were told that since it is a long time, it may take time for them to locate the document. He promised us to send us copy of the resolution or amendment whatever it is. He informed us that only 40-45 slate pencil units are registered with them now. There are 2500 insured persons registered with this office (Not necessarily employed by Slate pencil). The units are located in Multanpur, Bobalgunj, Pipaliya Mandi, Kanghatti etc. Here we came across one Girdharilal (51) who worked in slate pencil for 22 years. He had started working since the age of 6. He had to stop working 10 years ago after he was found suffering from Silicosis. He lost his brother 5 years ago who was suffering from Silicosis. He gets benefits from Welfare Board as well as ESIC. He has been employed by ESIC as part time peon. He informed that there may be 5-11,000 workers in all in the industry including the mines. There may be 200-250 units, he estimated. He remembered having attended a conference in Bombay on silicosis some 20-25 years ago along with his 16 colleagues. They were then invited to Hong Kong for another Conference but could not attend for various reasons. He came back with the impression that silicosis is cured in Germany only. He informed that workers are paid 10-25,000 as advance by the employer and then worker becomes bonded and cannot raise his voice.

**Visit to DISH:**

We then visited office of the Directorate of industrial safety & health who have responsibility to implement Factory Act. The head Clerk informed us that there is no officer here now. The officer appointed here has been transferred to Indore and this office is now in charge of officer in Ujjain who visits Mandsaur once a week. He informed us that there are 45 registered slate pencil units. However the published report of the Welfare Board for the year 07-08 the number of the unit registered under Factories Act was below 30. The same report informs that the number of units has gone down by 20% during the reporting year. They have no data on silicosis. No notifications are received by this office. Diagnosis camp is organized every 6 months. Camps are organized in ESI dispensary. Date is fixed and conveyed to the employers who arrange to send the workers to the camp. There is no certifying surgeon here but the ESI Medical officers have been declared to be certifying surgeons by notification. Under Factory Act the notification is published to cover all units employing 1 or more workers. When we asked him what is the number of units which employs less than 10 workers and are registered under factory Act, he had no idea.

**Visit to ESI Dispensary:**

We visited ESI dispensary where we could meet two

doctors. This is a 25 bed hospital. They gave the story of the camp being organized the press note is sent to the local news paper notifying the date and banners are posted a places.

The workers who are not covered by ESI are also eligible to take part in the camp, they said, after some hesitation and consulting each other as if they were not sure! They informed us that X-rays are taken and clinical examination take place and occupational history is taken. The positive cases are sent to the Civil surgeon who takes final decision based on the reports by the ESI medical officers and issues certificate to the effect for the use of patient to get him/her registered with Welfare Board. The workers who are covered by ESIC are then sent to Indore for PFT. Based on PFT the patient is sent to Special Medical Board of ESIC, which take final decision. This dispensary does not have any Physician. The post has been abolished. They informed us that District collector got 100 units closed and now the numbers of patients has gone down.

Giving figures, we were told that in March, 09 there were 2 confirmed cases and one in October 2009. Since April 2008 total 7 cases have been detected. The doctors did not know where the ESI Act is applicable-particularly the provision of geographical notification and kept on saying that it is the employers who should get themselves registered.

Next we visited Mr.Ajaysinh Chauhan, President of the Welfare Board. It was courtesy call. He was very courteous

**Visit to Secretary of the Welfare Board:**

Next we visited Mr.J.S.Udde, Asst. Commissioner of Labor who also happens to be Member Secretary of Welfare Board. He helped us get copies of the MP Act which enabled form Welfare Board and copy of its last published Annual report. He informed us that there is no Govt. assistance for installing Local exhaust system. He did not know the number of mines or the workers engaged in mining slate stone. One year ago 139 units were ordered closer under Nuisance Act. These were the units in residential areas of Mandsaur city. In the village called Multanpura, population is 5-7,000 and there are estimated 100 slate pencil manufacturing units. It is known as Widow's village. It may earn highest revenue for the Govt but it is most backward village. He said that they want to see that the illegal units should be closed down as early as possible.

**Visit to Multanpura:**

In village Multanpura lots of units are going on but they do not register themselves under Factory Act. These units are run from the home and have reportedly refused to get relocated in industrial area. Still, the only one units which we could visit, had installed exhaust system but there was seemingly lot of distrust and scare from the Government

officers. The moment our car was parked in the village, the doors were closed. It was the officer of the Board who requested one of them to open the door and asked them not to worry. Had he not been with us we would not even have known as from the outside one cannot even imagine how big unit can be hosted in the house behind ordinary doors. They had huge open space behind the house where work was being carried out. As I understand even these units are paying the cess though they may not have been registered under Factory Act.

A group of suspicious villagers had gathered outside and as soon as we came out of, they started asking us who we are and what was the purpose of our visit. I introduced myself and told them about the situation in Khambhat and added that purpose of our visit was to learn good practices and get first hand information on the development for welfare of the victims. The group was ready to travel to Khambhat to explain the advantages of installing exhaust ventilation.

#### **Visit to industrial park:**

Welfare Board officer took us to the industrial park. It was Friday which is day for electricity staggering and hence units were closed. Few were open but only manual work was being carried out like packing by few women workers. We observed that all the units have installed exhaust systems with long chimneys. In that area there were so many units located. What we also observed in the industrial park that the chimneys have been installed but dust is not collected by way of dust collectors by employing bag filters.

#### **Observations and Suggestions:**

What we have observed that neither workers nor victims are organized. Moreover, there is no civil society organization existing which is working among the community for their rights. The Board is doing nothing for imparting health education to the workers. There is no training provided to the Medical officers and there is no mention of categorization as per ILO standard radiographs. One do not know how well the diagnosis is done. We came across a patient in the office of the Welfare Board who was registered 17 years ago and had been enjoying benefits since then. This raised a question whether the diagnosis was correct. Neither industrial hygiene studies nor monitoring of the silica dust at work is being done regularly. The Board itself can employ an Ind. Hygienist or get someone service for the purpose on and off and buying personal samplers etc. The Board has not thought of buying group insurance. Any way workers do not get the Compensation as per the provisions of W.C.Act or ESI Act. Impact on community (incidence of silicosis among community) is not known. We could not see any efforts to bring in the left out workers to diagnosis camps. Camps are organized in ESI dispensary and not in the area where the work is being carried outfit is not known if they have mobile X-ray unit which can be taken to

the field. Relocation of the units from Mandsaur city residential area to the industrial park is most important success and that can be replicated in other areas. Madhya Pradesh is in lime light for silicosis because of reports of large number of deaths due to silicosis among tribal in Alirajpur, Dhar, Kuxi and surrounding areas. These tribal do not receive benefits of any welfare scheme nor compensation due to them. The existing welfare Board should think of expanding its area to cover all silicotic workers in the State. The Board also should have thought of giving assistance for installing local exhaust ventilation systems. One do not know if any experimentation done for wet process and if that is feasible.

We observed that the confirmed cases of silicosis are not paid compensation for damages incurred and the Board may enter into contract with some insurance company to pay the compensation to the confirmed cases.

We propose to organize seminar in other parts of the country where the members of the Board may be invited to tell about this experiment. We may organize meetings with the officers in Gujarat to show case Mandsaur model for resolving issue of Silicosis among Agate workers.

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## Hearts of Darkness - Workers in India, including children, will die young grinding gemstones for Valentine's Day

More than 2,000 men, women and children in India have died miserable deaths due to silicosis, while polishing gemstones for export to the U.S. and Europe.

Agate and other semi-precious gemstone hearts, beads pendants, earrings, bracelets, ornaments—and even rosary beads and the Star of David are made in India.

Workers are paid just 17 ½ to 33 ½ cents an hour to do one of the most dangerous jobs in the world, squatting in front of primitive grinding wheels, using their fingers to press agate and other semi-precious stones against the wheels to shape them. In the process they are covered with silica dust.

Many workers start when they are 12 or 13 years old. The National Labor Committee met an eight-year-old boy who was covered with silica dust as he worked shaping agate beads.

The child workers are paid 11 to 13 ½ cents an hour.

Thirty percent of all gemstone grinders will die of silicosis.

Six to ten percent of non-working family members and neighbours will also die of silicosis due to exposure to the airborne silica dust.

Scores of others are reduced to skin and bones, unable to walk and struggling to breathe.

When poor workers borrow money from their “trader”—who supplies the raw stones, organizes the manufacture and export of gemstones—they become “bonded labour.” If the worker dies, his wife is asked to take over the grinding. If she dies, her children will be asked to do so.

**Silicosis is 100 percent preventable. But without proper occupational safeguards, with continued exposure, silicosis becomes 100 percent fatal.**

It does not have to be this way. With simple technology—a wet grinding process in combination with exhaust ventilation systems can drastically reduce exposure to silica dust.

The government of India has also failed to enforce every single one of its labour laws to protect the lives of the agate grinders.

The National Labor Committee is calling upon the American people to sign a letter to the International Colored Gemstone Association, based in New York City and Idar-Oberstein, Germany, urging that we act together to end the exploitation, misery and wreck less homicide of India’s gemstone grinders. We are also asking the U.S. Government to help.

The Executive Summary is part of the report published by National Labour Committee on February 11, 2010. To download and read the complete report visit - <http://www.nlcnet.org/reports?id=0001>

## Facts on Safety at Work

**Each year, an estimated two million women and men die as a result of occupational accidents and work-related diseases. Across the globe, there are some 270 million occupational accidents and 160 million work-related diseases each year.**

### Key Statistics

- Each day, an average of 6,000 people die as a result of work-related accidents or diseases, totalling more than 2.2 million work-related deaths a year. Of these, about 350,000 deaths are from workplace accidents and more than 1.7 million are from work related diseases. In addition, commuting accidents increase the burden with another 158,000 fatal accidents.

- Each year, workers suffer approximately 270 million occupational accidents that lead to absences from work for 3 days or more, and fall victim to some 160 million incidents of work-related disease.
- Approximately 4% of the world’s gross domestic product is lost with the cost of injury, death and disease through absence from work, sickness treatment, disability and survivor benefits.
- Hazardous substances kill about 438,000 workers annually, and 10% of all skin cancers are estimated to be attributable to workplace exposure to hazardous substances.
- Asbestos alone claims about 100,000 deaths every year and the figure is rising annually. Although global production of asbestos has fallen since the 1970s, increasing numbers of workers in the USA, Canada, UK, Germany and other industrialized countries are now dying from past exposure to asbestos dust.
- Silicosis – a fatal lung disease caused by exposure to silica dust still affects tens of millions of workers around the world. In Latin America, 37% of miners have some degree of the disease, rising to 50% among miners aged over 50. In India, over 50% of slate pencil workers and 36% of stonecutters have silicosis.

### **The role of the ILO**

A preventative safety and health culture comprises all the values, managerial systems and practices, participatory principles and working behaviour conducive to creating a safe and healthy working environment. The ILO’s Occupational Safety and Health Convention, 1981 (No. 155) provides a suitable framework supporting a safety and health culture at work.

While the development of a safety culture begins during a child’s early education years, the effective prevention of occupational accidents and diseases begins at the enterprise level. Prevention involves participation from governments and workers’ and employers’ organizations. Implementation of work organisation procedures, the provision of training and information to workers and inspection activities are important tools to promote a safety and health culture. Companies with occupational safety and health and management systems have good records both in safety and productivity. Meanwhile, government labour inspectors have a pivotal role. More than 130 member States have ratified the Labour Inspection Convention, 1947 (No. 81), making it one of the most ratified instruments of the organization.

The ILO Guidelines on Occupational Safety and Health Management Systems (ILO-OSH 2001) provide a powerful tool for developing a sustainable safety and health culture at the enterprise level and mechanisms for the continual improvement of the work environment.

## ILO Standards

More than 70 ILO Conventions and Recommendations relate to questions of safety and health. In addition, the ILO has issued more than 30 Codes of Practice on Occupational Health and Safety.

With regard to the special themes of the 2005 World Day, the ILO has long been conscious of the need for special treatment for the construction industry, having adopted its first convention for the industry in 1937. In 1988, the Safety and Health in Construction Convention (No. 167) and its associated Recommendation (No. 175) were adopted, reflecting the need for a broad approach to tackling some of the safety and health problems in construction. Complementing this approach is the ILO Code of Practice on Safety and Health in Construction, approved in 1992. And while the 2001 Guidelines on Occupational Safety and Health Management Systems apply to all economic sectors, they are particularly useful for the construction industry, as they highlight issues related to sub-contracting.

With regard to younger and older workers, the Minimum Age Convention 1973 (No. 138) and the Worst Forms of Child Labour Convention 1999 (No. 182) and their associated Recommendations (Nos. 146 and 190) prohibit younger workers under the age of 18 from carrying out hazardous work. The Older Workers Recommendation 1980 (No. 162) specifies measures to be taken to reduce difficulties which can be encountered by older worker relating to advancement of age.

*This information has been taken from ILO Website. For more information please visit [www.ilo.org/safework](http://www.ilo.org/safework)*

## News on OSH

### Red dust brings early death to West Singhbhum

Mar. 18--GUA (JHARKHAND): -- Ten-year-old Nandi's skin and hair have a reddish-black hue. She has poor vision. And her skin is peeling off below her knees.

Nandi, an orphan girl child, collects iron ore dust droppings from trucks that transport the ore from this area in Jharkhand's West Singhbhum district, 160 km south west of Ranchi.

Prolonged exposure to this red dust has given her siderosis, a disease that damages the elasticity of the lungs.

There are thousands of people -- young and old -- like Nandi in this backward area where the only industry is mining and allied activities.

All of them suffer from similar symptoms. And all of them work for the crusher units -- mostly illegal outfits -- that operate in the area.

The local doctor has recommended that Nandi, who earns

Rs 1,000 a month, go for a lung function test immediately. But her aunt, Shitalmar Hessa, told Hindustan Times: "We cannot afford the tests and the treatment." The test at a private lab costs Rs 2,000 to 4,000.

"Most labourers lead a hand-to-mouth existence and fighting hunger is their biggest priority. Diseases and changes in skin tone are insignificant issues for them," said Nazir Khan, a local Congress leader fighting the politically influential companies that run the mines and crusher units.

But these are just visible manifestations of a deeper problem.

"Labourers exposed to this red dust are sure to die early," said Dr P.K. Mohanty, a specialist in dust-related ailments, who works among the poor in the area.

Workers in this region have a life span of only 40-45 years, added Khan.

Reacting to a pointed query on the issue, [Jharkhand](#) Deputy Chief Minister Raghuvar Das said: "I have come to know that there are some pollution-related problems in the iron ore belt. I am going to instruct the district authorities to send us a report. The government will certainly act against the culprits."

Local officials said the government has no statistics or information on the problem.

But Dr P.K. Gangopadhyay, chief of the Regional Institute of Occupational Health, a government of India body that functions under the Indian Council of Medical Research (ICMR), alleged that the Jharkhand government did not document the victims to avoid paying compensation.

Ashok Verma, general manager of Steel Authority of India, which has mines in the area, said the illegal crusher units are playing havoc with the environment.



■ Jackie Nag, 18, works in an iron ore dump yard in Jharkhand's West Singhbhum district. He suffers from vitiligo – a disorder that causes depigmentation in patches of skin – a common ailment in workers exposed to red dust. ARVIND KUMAR SHARMA / HT PHOTOS

"Some privately-owned smaller mines and crusher units operating in residential areas are putting people's lives at risk."

There are 41 mines and more than 200 legally and illegally run crusher units in this iron ore mining hub spread over



southwest Jharkhand to south-eastern Orissa, employing youngsters on contract.

The labourers work without safety equipment like nasal masks, earplugs and helmets, which are mandatory under Central Pollution Control Board.

Author: B Vijay Murthy – Hindustan Times, Dated: March 18, 2010

<http://www.hindustantimes.com/rssfeed/jharkhand/Jharkhand-to-shut-down-its-killer-mines/Article1-520736.aspx>

## Jharkhand to shut down its killer mines

A day after HT exposed how iron ore dust from West Singhbhum's mines and crusher units was choking and killing locals, the Jharkhand government swung into action.

"The government will shut down all polluting crushers and mining companies," said Jharkhand Food and Civil Supplies Minister Badkunwar Gagrai, a legislator from the area, which borders Orissa.

"They are not just choking our lungs, they are polluting the entire environment — land, air and water — as well," he said, adding that the government action would begin after the current assembly session, which ends on March 26.

However, West Singhbhum Deputy Commissioner Sunil Kumar said: "Unless we are provided specific and concrete information, we cannot take action against anyone."

About 40 mining companies and 200 crushers — mostly illegal, operate in the area, 160 km south west of Ranchi.

But the Jharkhand State Pollution Control Board (JSPCB) said there are only 142 crusher units of which it had shut down 60 for failure to adhere to pollution norms.

"We will shut down 20-30 more," said R.K. Sinha, secretary, JSPCB, adding: "I am preparing a draft on steps to be taken to minimise pollution and save people from various health hazards being caused by the red dust. Swift action will be taken as soon as the government clears the draft."

But highly placed sources in the state told *Hindustan Times* said that this was easier than done. "Most polluting mines and crushers operate under the patronage of powerful politicians who prevent law enforcement agencies from taking tough action against them," one such source said.

"Whether it's Karnataka or Jharkhand, the mining lobby is so strong that the government turns a blind eye to the disaster they are causing to human lives, especially children," said Enakshi Ganguly, co-director of the Delhi based HAQ: Centre for Child Rights, an NGO that is working in the field of children in the mining sector.

Author: B Vijay Murthy – Hindustan Times, Dated: March 19, 2010

<http://www.hindustantimes.com/rssfeed/jharkhand/Jharkhand-to-shut-down-its-killer-mines/Article1-520736.aspx>

## Use safer technology to reduce occupational hazards: Sheila

NEW DELHI: With medical science now establishing that environmental factors may be contributing as much as 30 per cent to the total burden of illness in a given society, Delhi Chief Minister Sheila Dikshit on Thursday said identifying occupational illnesses related to environment has become important.

Speaking at the inauguration of a three-day international conference on "Preventing Emerging Occupational and Environmental Risks in South Asia and Beyond", the Chief Minister said occupational and environmental hazards are being noticed due to fast economic development and increasing utilisation of natural resources. She said much of the burden of disease can be done away with by taking adequate measures for preventing and controlling the use of harmful chemicals. Ms. Dikshit advocated the need to have safer technologies and less harmful materials. She also stressed on generating and using more renewable energy.

Such measures, in turn, would lead to a lesser burden on the overcrowded hospitals. Apart from this, Ms. Dikshit said a better social security system was also needed for providing a helping hand to persons faced with occupational and environmental hazards. She said health and happiness instead of economic growth should be accepted as parameters for development of any nation.

Delhi Health Minister Kiran Walia spoke of how her department has been keen on making the health system affordable. She expressed confidence that the conference -- organised by the Centre for Occupational and Environmental Health, Maulana Azad Medical College in collaboration with Collegium Ramazzini, Italy, and Drexel University School of Public Health, Philadelphia -- would provide an opportunity to delegates to have a useful interaction.

During the conference, Philip J. Landrigan from the US expressed his views on environmental health risks to children while his compatriot Arthur Frank spoke on asbestos hazards with focus on Asia. The conference is unique in the sense that it is being attended by academicians, employers and workers' representatives, regulators and government officials

Author: Special Correspondent – The Hindu, Dated: December 18, 2009

<http://www.thehindu.com/2009/12/18/stories/2009121853850400.htm>

## Asbestos cancer breakthrough

SCIENTISTS have safely tested a potential vaccine they hope can beat a deadly cancer linked to asbestos.

The development has been described as the most significant breakthrough in the battle against Clydeside's death dust ticking time bomb.

Research leader Dr Joachim Aerts said: "We hope it will be possible to increase survival in patients with mesothelioma and to eventually vaccinate people who have been in contact with asbestos."

The news has been greeted with enthusiasm in Clydebank where thousands of workers were exposed to asbestos in places such as John Brown's shipyard and Turner & Newalls Dalmuir asbestos factory.

The town is the worst affected area in the UK for mesothelioma deaths.



The cancer is extremely difficult to treat and often proves fatal in a very short time-scale.

Bob Dickie, of Clydebank Asbestos Group, which has more than 1,400 members, said: "If this becomes a reality, it would be a tremendous step forward in the treatment of mesothelioma. If these experiments prove to be successful then it would be wonderful for people who suffer from this terrible disease."

Ten patients with advanced mesothelioma were given the new treatment - being called a vaccine - and all showed signs of recovery.

<http://www.clydebankpost.co.uk/news/roundup/articles/2010/04/07/398944-asbestos-cancer-breakthrough/>

**Wednesday, 7th April, 2010 4:00pm**

## Kerala State Human Rights Commission Order on Asbestosis

Kerala State Human Rights Commission has passed an order dated 31 January 2009 regarding use of Asbestos products in the state. The commission states that "The exposure to Asbestos results in long tragic chain of adverse medical,

legal and social consequences. It is therefore, clear that the use of asbestos for roofing the building especially school buildings lead to severe consequences and the responsibility of the Government is to secure to all its citizens justice – social, economical and political as per the preamble of the Constitution. The facts and legal position show that it is for the Government to see that Asbestos roofing in the school buildings are avoided in future and that the existing school buildings roofed with Asbestos sheets are also renovated by removing the asbestos sheets and replaced with country tiles". Major recommendations in the order include

1. The state government will replace asbestos roofs of all school buildings under its control with country tiles in a phased manner.
2. The government will take steps to see that the schools run under the private management also replace the asbestos roofs with country tiles by fixing a time frame.
3. The government should see that in future no new school is allowed to commence its functions with asbestos roofing.

The commission also noted that despite 13 reminders to the Education department of the state government to provide a report on the issue, no reply was received.

Further, the state government is yet to furnish an Action Taken report on the implementation of the order despite repeated reminders.

## Mountain Desert silicosis

A study was undertaken to evaluate the radiological miliary shadows in the high landers of a Himalayan desert for the presence of silicosis.

Seventeen high landers attending the Medicine OPD of a multi speciality medical camp at Kaza in Himalayas (height 12,500 feet above sea level) having radiological miliary shadows were included in the study. A detailed lifetime work place history was taken. In the laboratory workup their hemogram, repeat chest skiagram, peak expiratory flow rate, urinalysis and electrocardiogram were undertaken. Their localities were looked for the presence of industries particularly for silicosis prone work place. The silica contents of upper strata of soil were estimated.

Silicosis--chronic simple variety was present in nine males and eight females. The youngest person was 43 years of age and oldest person was of 65 years of age. There was no silicosis prone industry in their locality. Four had taken repeated courses of anti-tubercular treatment in adequate doses for these miliary shadows without any change in the radiological shadows. Three had silicosis prone work history. Seven were smokers and two had hypertension. The miliary shadows were 2-4 mm in size and hilar lymphadenopathy was in 11 and fine calcification of lymph nodes in two. Peak expiratory flow rate was reduced. Upper

strata of soil had a silica content of 36.8 percent.

## CONCLUSION:

Silicosis developed in high landers of the Himalayas even without working in silicosis prone work place. They were exposed to silica from the non-work place silica rich environment.

*Published in J Assoc Physicians India. 1999 May; 47(5):503-4  
Author - Patial RK (IG Medical College, Shimla, HP.)*

## Occupational diseases: 24 compensation claims taken up

### **Special medical board meets after 5 yrs, panellists include Employee State Insurance Corporation staff**

After a wait for nearly five years, compensation cases of a worker who died of byssinosis and three others, who died of silicosis, were finally presented before a special medical board in Vadodara on Friday.

Employee State Insurance Corporation (ESIC) officials said that if required, another special board would be held in the city soon to dispose of several pending cases of compensation for occupational diseases.

On Friday, according to Regional Joint Director of ESIC C V Joseph, 25 cases were presented before the special board. Of these, 24 were processed. "The special medical board could not be held earlier because of various reasons such as making arrangements for special equipments to judge various illnesses. This year we held the court after a long time," said Joseph.

He added that the panellists were called from Mumbai ESIC. "In order to process the pending complaints, we are going to hold the court again," he said.

According to sources, while waiting for compensation, four workers died after they had filed their cases around 2004-2005.

Among the workers who died before getting compensation include an employee of the Mafatlal Textile Mill in Nadiad. Mahendra Pratap Singh died on June 16, 2008 of byssinosis, a lung affliction that affects the cotton ginning workers.

According to ESIC advisory board member Jagdish Patel, Singh's family had filed the compensation claim in 2005. "However, not a single special medical board was held in the last five years. The cases of byssinosis have come down because of the efforts of the labour union and the awareness programmes organised by the industry as well as the unions," said Patel.

Meanwhile, those claimed compensation at the special medical board for their deceased kin include the family

members of Kalu Vijiya Bhagora of Doli Jati village in Jhalod taluka of Dahod district, and Dhadu Tadiya Kamor and Mansingh Jeta Damor of Kharsana village in Dahod.

While Dhadu's wife Ratudi came to present her husband's case, Tansinh, a victim of silicosis himself, represented his brother Mansinh. According to them, the deceased worked in Godhra's Bharat Silica factory.

On the other hand, about 10 workers from Mafatlal Industries claimed 'hearing loss' due to noise pollution while working in the cotton ginning units. The claimants included Rajeshbhai Jashbahi, Salim Valimohammad, Vitthalbhai Manibhai,

Dalabhai Kiranbhai, Maheshbhai Muljibhai, Baldevbhai Jivabhai, Babunath, Vasantbhai Rajubhai, Babubhai Keshavbhai and hagwansingh Swaroopsingh, all from Nadiad.

*Author - Anupam Chakravartty Posted: Sunday, Apr 11, 2010 at 0157 hrs Vadodara:*



### **Raghunath Munwar from Gujarat adds about the Medical Board**

The ESI special medical board (which took place in Ahmedabad) was also presented with 2 cases of asbestosis from Digvijay cements and one case from AEC (coal dust). But the board rejected the cases since the medical survey report done ESIC (Bapu Nagar) was not in the documents. Where did the documents go? The ESIC had misplaced

## Did You Know

### Incidence of Silicosis in Kolar Gold Fields, Mysore

It was the impression till recently that there were no cases of silicosis among miners of Kolar Gold Fields (KGF). In the report of "The Miners Phthisis Conference, South Africa" it is mentioned that no case of silicosis has been reported from KGF. While silicosis was so common in other gold mining areas, such as South Africa, that no case had been reported from KGF was really surprising. It was suggested that an investigation may be started to find out the existence or not of silicosis in KGF. A committee was formed in 1931 to collect material and to study the peculiar conditions existing in this mining area.

Clinical histories of about one hundred labourers working underground were collected. Seventy five chest radiograms were taken. As a control, radiograms of twenty people unconnected with underground work were also taken. Three lung specimens removed, Post Mortem of labourers who died of respiratory disease was made available. Sections were prepared and examined by Pathologists.

After a careful study of this material it was concluded that cases of silicosis do exist in KGF. Only it takes ten to fifteen years of underground work to develop signs of silicosis. It is due to the fact that the quartz reef in KGF contains only 8 to 17% of free silica as compared to the high percentage, namely, 80 to 90 in the South African rock. The collected material was sent to "The Bureau of Medical Research, South

them!!! The workers or Raghunath Ji were never given a copy. So the workers who had waited for 5 long years for compensation were asked to leave since the government had misplaced their papers!!! Can you imagine what they were feeling? They broke down and Raghunath Ji who was always there with the workers started taking pictures and recording the process. The ESI officials snatched his camera, abused him, and also heckled the local media present at the spot. Raghunath Ji has filed complaints against the ESI officials. Further important medical documents were missing from the files of other cases presented before the board. Where were those documents? Comfortably lying in files in different offices. Who is responsible to bring those documents for the board? ESI Officials (DO THEY CARE?). A complaint has been filed with ESIC regarding the procedure and complete apathy on part of ESI employees. Some Photos during the Medical Board



### Use of Asbestos during construction for Common- Wealth Games

Use of Asbestos has been an extremely controversial issue for the Indian Government. On one hand they are reluctant to Ban Asbestos, and on the other hand, they are not using Asbestos during the construction activity related to CWG in Delhi.

According to a RTI filed by OEHNI Secretariat, Central People Works Department (CPWD) categorically denies using Asbestos for construction. Further according to them, this is due to change made in the Delhi Schedule of Rates (DSR) 2007 effective 01/09/2007 in which Asbestos material has been replaced with Non-Asbestos material (except water pipes). Another response from the same agency even terms this as a matter of policy of Government

So are we to understand the double policies of the government where in it imports large quantities of asbestos from Canada, Russia, Zimbabwe and other places for use in common man's houses, but does not use the same material where foreign Athletes and dignitaries will be staying. The government even stalled the addition of Asbestos in the Rotterdam Convention. The government non-officially makes decisions about not using Asbestos products but different agencies and state governments put in pressure to lift the ban on mining of Asbestos in the country. If asbestos use is safe (as claimed by the industry and some state governments and government agencies), why is it not being used during construction? Its time Government defines a clear policy on non-use of Asbestos and place a ban on all forms of Asbestos.

Africa” for expert opinion.

Dr L G Irvine and Dr S W Simson were kind enough to give their opinions after studying the material sent to them. Dr Irvine reports “The Pathological and Radiographic evidence appears to create a prima facie case that instances of Silicosis do occur amongst underground workers in the KGF.” He also adds that the material forwarded was inspected by Dr A Mavogardato who concurs in the general conclusions stated in the report. So it can be now affirmed that silicosis does exist in KGF, Mysore.

In the Journal of Hygiene, August 1933, William R Jones states that the gold-bearing quartz rock of the KGF contains more quartz than the South African rock and yet produces dust that caused no case of silicosis. There is a note on this article in Nature, December 16, 1933 alluding to the point that there was no silicosis in KGF.

In view of what has been said, the statement contained in the paper written by W R Jones is not quite correct. The incidence of silicosis may not be so great as in South Africa but there is no doubt that Silicosis does exist among the underground labourers in KGF.

The object of writing this article is merely to point out that Silicosis does exist in KGF, though not so common as in South Africa.

Author - C Krishnaswami Rao, B.A, M.B., C.M., M.R.C.P, M.R.C.S

The article was published in February 1934 issue of “Current Science”

## Updates

### Silicosis Case in Supreme Court

Case is ongoing in Supreme Court regarding Silicosis. In the last hearing held in February 2010, the court has directed National Human Rights Commission (NHRC) to submit its response regarding the steps taken to prevent Silicosis.

Talks are also underway to implement the courts earlier order (March 2009) to provide compensation to the deceased victims through concerned authorities.

Tasks Ahead – Identification of victims, Ensure compensation is provided speedily

### Asbestosis Case in Rajasthan High Court

A PIL has been filed on Asbestosis in the Rajasthan High Court in March 2010. The PIL was drafted and filed by Rajasthan State Mine Labour Union. The matter is expected for hearing soon. The PIL also aims to address the issues arising out of the earlier Supreme Court order which required all Asbestosis victims to be certified by NIOH.

Note – In case you come across any facility using Asbestos as part of their manufacturing process in India, please send details at [oejni.del@gmail.com](mailto:oejni.del@gmail.com)

## Questions and Answers

### **Any Answers**

1. What are the maximum number of hours you should work per week?
2. What are the regulations that govern the maximum working hours?
3. What workers have special working hour's rules?
4. What is the average working hours limit in a 24 hour period for people who work at night?
5. Name two items in a workplace that may cause lung diseases.
6. Name two symptoms of silicosis / Asbestosis.
7. How do you identify the fire risks at work?

8. Name two dangerous substances you may find in the workplace.
9. How do musculoskeletal problems arise in the workplace?
10. Name three safety signs you'd expect to see in a workplace.
11. Name two of the four most common causes of workplace accidents.

Please send in your answers by e-mail to [oejni.del@gmail.com](mailto:oejni.del@gmail.com)

**Any Questions** – Please send in your questions on Occupational Health and Safety to [oejni.del@gmail.com](mailto:oejni.del@gmail.com) and our expert team will endeavor to provide all details

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