NEED FOR APPROPRIATE TECHNOLOGY
TO DIAGNOSE
ASBESTOS RELATED DISEASES

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June 4, Seoul Korea.
WHO estimates that about **125 million** people in the world are exposed to asbestos at the workplace.

- In 2004, Asbestos Related Diseases (ARD)- (Asbestosis, Lung Cancers and Mesothelioma) **resulted in 107,000 deaths and 1,523,000 disabilities**

- In addition, several thousands of deaths can be attributed to other asbestos-related diseases, as well as to non occupational exposures to asbestos- WHO
Asia at the Epicentre

- Ban/reduced use in the Industrialized countries has shifted increased use to Industrialising countries especially in Asia.
- Out of global usage of about 2 millions Tonnes, Asia accounts for more than 65% of the global consumption.
- China, India, Indonesia, Vietnam and Thailand are among the top 10 countries in Global asbestos Consumption.
Trend of Asbestos Consumption by Continent 1950-2012

Top 10 Asbestos Consuming Countries in 2012

<table>
<thead>
<tr>
<th>Country</th>
<th>Asbestos Consumption (tonnes)</th>
<th>% of World Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>530,834</td>
<td>27.1%</td>
</tr>
<tr>
<td>India</td>
<td>493,086</td>
<td>25.1%</td>
</tr>
<tr>
<td>Brazil</td>
<td>167,602</td>
<td>8.5%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>161,824</td>
<td>8.2%</td>
</tr>
<tr>
<td>Russia</td>
<td>155,476</td>
<td>7.9%</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>103,608</td>
<td>5.3%</td>
</tr>
<tr>
<td>Vietnam</td>
<td>78,909</td>
<td>4.0%</td>
</tr>
<tr>
<td>Thailand</td>
<td>58,008</td>
<td>3.0%</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>54,704</td>
<td>2.8%</td>
</tr>
<tr>
<td>Ukraine</td>
<td>42,000</td>
<td>2.1%</td>
</tr>
<tr>
<td>World Total</td>
<td>1,961,728</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
Top 10 Asbestos Consuming Countries, 2000-2013

ARD an Hidden Epidemic

• More than countries worldwide have banned all forms of asbestos but the bans have come after a painful ARD burden.

• ARDs have long latency period so countries with past use will continue to witness the disease.

• Some Asian countries like Japan, Korea are now witnessing similar pattern of ARD diseases.

• Yet developing Asia like China, India, Indonesia and Thailand report very few ARD’s.
ARD Diagnosis and Underreporting

• Absence of reporting does not mean absence of ARD

• ARDs are difficult to diagnose and countries require certain level of skills and technical resources – Clinical, Pathological and even social resources.

• Workers exposed to Asbestos generally do not have access to health care and many of them work informally- ship breaking workers, construction workers, automobile repair workers.
## Gross Under-reporting Accidents

<table>
<thead>
<tr>
<th>Country /Region</th>
<th>Fatal Accidents Reported to ILO in 2001</th>
<th>Estimate by the ILO</th>
<th>Fatal Accidents Reported to ILO in 2003</th>
<th>Estimate by the ILO</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>12736 (12%)</td>
<td>90295</td>
<td>180 (0.18%)</td>
<td>98000</td>
</tr>
<tr>
<td>India</td>
<td>222 (0.55%)</td>
<td>40133</td>
<td>179 (0.32%)</td>
<td>48000</td>
</tr>
<tr>
<td>Rest of Asia</td>
<td>3051 (4%)</td>
<td>76886</td>
<td>1247 (1.5%)</td>
<td>81000</td>
</tr>
</tbody>
</table>
Victims in Asia
Disaster Waiting to Happen

• Developing Asia with present usage and exposed population is sitting on “Silent Time Bomb”

• Issues of Diagnosis
  – Doctors not available
  – Available doctors not trained to diagnose
  – Diagnostic tools not available even simple X ray
  – Often ARD’s especially asbestosis misdiagnosed as Tuberculosis
  – Estimates suggest China and India have missed 5100 and 2200 cases of mesothelioema respectively (le et.al 2011)
Training of Medical Practitioners

- Initiative by AMRC and Asian Network for the Rights of Occupational and Environmental Victims (ANROEV).
- Grassroots Organisations select doctors from community that received training from experts associated with ANROEV
- Certification from University of Illinois Chicago (UIC)
- Aimed at improving diagnostic at ground
Problems at ground

• Great divide between “those who Know” – Scientists, Trained doctors and experts and ‘Those who are Exposed” – workers and community members

• Diagnosis keeps on evolving – X-ray to HRCT scan, though use of technology makes diagnosis easier but realities at ground make it difficult to implement

• Diagnosis for what? Compensation or treatment

• Often workers and community members remain passive subjects in this discourse and mere objects of study
• Diagnostic institutions based on exposure in Factory 8 hours work
• Work and exposure happens outside factory
• It has to respond to existing reality
  – involve primary health providers and grassroots organisations
  – Provide mobile diagnosis since work is mobile
Appropriate technology

- Diagnostics that is available locally and can be done locally. (X-Ray)
- Impacted population is aware, empowered and plays an meaningful role in the process
- Role of grassroots organizations (workers’ community organisations)
  - Provide Access to community
  - Can take work history
  - Organise exposed people
- Health Camps
  - Identify suspected cases
  - X-ray and Pulmonary function test
Change the System?

• Diagnostic institutions based on exposure in Factory 8 hours work
• Work and exposure happens outside factory
• It has to respond to existing reality
  – involve primary health providers and grassroots organisations
  – Provide mobile diagnosis since work is mobile
2009 Workers Memorial Day
April 28, 2009, Hong Kong
Asbestos free world for our Children

Thank You