

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

# Smoking Control at Workplace

**Dr. E.Rafeemanesh**

*Associate Professor of Occupational Medicine  
Mashhad University of Medical Sciences*







# Workplace Hazards



**Smoking is a work hazard**

# Interactions between occupation and cigarette smoking

|  OCCUPATION |  EXPOSURE |  SMOKING-<br>OCCUPATION<br>INTERACTION |  DISEASE                             |
|--|--|---|---|
| Asbestos workers, construction workers and others in contact with asbestos                   | Asbestos   | + ×   | <ul style="list-style-type: none"> <li>• Lung cancer</li> <li>• Chronic lung disease</li> </ul>                         |
| Aluminium smelter workers  | Polynuclear hydrocarbons   | + or ×  | Bladder cancer  |
| Aircraft and mining industry and many others   | Noise  | +   | Loss of hearing and hearing acuity  |
| Cement workers   | Cement dust  | +   | <ul style="list-style-type: none"> <li>• Chronic bronchitis</li> <li>• Obstructive lung disease</li> </ul>              |
| Chlorine manufacturing   | Chlorine   | +   | Chronic obstructive lung disease  |
| Coal miners  | Coal dust  | +   | Chronic obstructive lung disease  |
| Copper smelter workers   | Sulphur dioxide  | +   | Chronic obstructive lung disease  |
|  | Arsenic  | + or ×  | Lung cancer   |
| Grain workers  | Grain dust   | +   | <ul style="list-style-type: none"> <li>• Chronic bronchitis</li> <li>• Obstructive lung disease</li> </ul>              |
| Organic chemicals  | Carcinogens  | + or ×  | Cancer of various organs and tissues  |
| Rock cutters, foundry workers  | Silica dust  | +   | Chronic obstructive lung disease  |
| Textile workers  | Cotton, hemp, flax, dust   | ×   | <ul style="list-style-type: none"> <li>• Acute airway obstruction (byssinosis)</li> <li>• Chronic bronchitis</li> </ul> |
| Uranium miners and many other workers in radioactive environments                            | Alpha radiation (Radon)  | ×   | Lung cancer   |
| Welders  | Irritant gases, metal fumes, dusts, (Radon)  | +   | <ul style="list-style-type: none"> <li>• Chronic bronchitis</li> <li>• Obstructive lung disease</li> </ul>              |

Source: World Health Organization 1992.

+ = Additive

× = Multiplicative

× = Probably Multiplicative



# Smoking costs



- ❑ More employee absenteeism
- ❑ Higher annual health-care costs for smokers and higher health insurance costs
- ❑ Decreased productivity on-the-job
- ❑ Increased early retirement due to ill health
- ❑ Higher maintenance and cleaning costs
- ❑ Higher life insurance & fire insurance premiums
- ❑ Higher risk of fire damage, explosions and other accidents related to smoking





# Environmental Tobacco Smoke: Workplace Policy- Canada

---

- It has been estimated by the Conference Board of Canada that in 2012, on average, each employee who smokes costs the employer **\$4,256 a year.**
- These costs are attributed to increased absenteeism, lower productivity, unscheduled smoke breaks, maintenance of smoking areas, property damage, and health and fire insurance costs.



# Smoking by Industry, Occupation, & Gender

- National Health Interview Survey data for working adults 18 years or older (2004-2011). Overall **19.6% of workers** were current smokers:
  - Men: 22.8%
  - Women: 18.3%
- Current cigarette smoking was highest among the following groups:
  - Workers with less than a high school education (28.4%)
  - Workers with no health insurance (28.6%)
  - Workers living below the federal poverty level (27.7%)
  - Workers aged 18–24 years (23.8%)

# Cigarette smoking by industry:

- Education services: 9.7%
- Mining: 30%
- Construction and extraction: 31.4%
- Healthcare and social assistance: 16%
- Accommodation and food services: 25.9%

**Blue-collar workers** are more likely to be smokers than white-collar workers.







World Health  
Organization



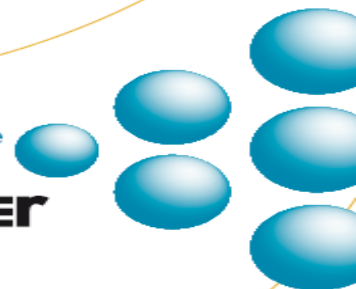
# MPOWER Measures

---

- **M**onitor tobacco use and prevention policies
- **P**rotect people from tobacco use
- **O**ffer help to quit tobacco use
- **W**arn about the dangers of tobacco
- **E**nforce bans on tobacco advertising, promotion and sponsorship
- **R**aise taxes on tobacco.

fresh and alive

**mpower**





# Comprehensive smoke-free legislation is in place in one third of countries.

SMOKE-FREE LEGISLATION (2020)





# Tobacco-free public places

- Tobacco-free public places means that ALL indoor workplaces and indoor public places should be **100%** smoke-free.
- Designating indoor spaces for smokers breaks these standards and is not in conformity with the WHO Framework Convention on Tobacco Control guidelines. Designated smoking areas should not be allowed indoors.





# Completely smoke-free workplace

---

- There is no safe level of exposure to ETS. Ventilation cannot “clear the air” and protect workers from exposure.
- Enclosed smoking rooms may be used as a transitional arrangement, but should be phased out as quickly as feasible. Furthermore, provision of well-ventilated smoking rooms can be costly.
- A meta-analysis of 20 studies of worksite smoking cessation programs found an average **quit rate after 12 months of 13%**, much higher than the national average among all smokers of 2.5% (US, 1990 data). Quit rates were even higher for heavy smokers.
- Cessation programs are relatively low-cost and are highly cost-effective (Novotny *et al.*, 2000).





International  
Labour  
Organization

# Health Protection + Health Promotion





International  
Labour  
Organization

A decorative graphic consisting of overlapping yellow, red, and blue squares with a black crosshair is positioned to the left of the title.

# Tobacco-free workplace: ILO

---

- Workplace smoking can be a serious safety and health hazard and a cause of conflict at work.
- **Seven out of ten smokers** want to quit and admit that a smoke-free workplace would provide a supportive environment for employees trying to quit.
- Smoke-free policies in the workplaces of several industrialized nations have reduced total tobacco consumption among employees by an **average of 29%.**



# Smoking cessation methods at workplace: ILO

---

- **Unassisted methods**, which include going “cold turkey” (i.e., just stopping without recourse to any special techniques); gradually reducing the number of cigarettes smoked per day; using low-tar or low-nicotine cigarettes; quitting with friends, relatives or acquaintances; or substituting another tobacco product for cigarettes (snuff, chewing tobacco, pipes or cigars).
- **Assisted methods**, which include attending a program or a course with or without a fee; consulting a mental health professional; hypnosis; acupuncture; and using nicotine gum or nicotine skin patches.

# Smoking Control at workplace: NIOSH Recommendation

- Establish and maintain smoke-free workplaces that protect those in workplaces from involuntary, secondhand exposures to tobacco smoke and air borne emissions from e-cigarettes ,...
- Smoke-free zones should include:
  - All indoor areas without exceptions (i.e., no indoor smoking areas of any kind, even if separately enclosed and/or ventilated)
  - All areas immediately outside building entrances and air intakes
  - All work vehicles







# **Smoking Control at workplace: NIOSH Recommendation**

---

- Establish and maintain entirely tobacco-free workplaces, allowing no use of any tobacco products across the entire workplace campus.
- Comply with current OSHA and MSHA regulations that prohibit or limit smoking in work areas characterized by the presence of explosive or highly flammable materials
- Provide information on tobacco-related health risks and on benefits of quitting to all employees (e.g., contractors and volunteers).
- Given available data on the safety of exposure to e-cigarette emissions, these products should be included in indoor smoking policies.
- Provide information on employer-provided and publicly available tobacco cessation services to all employees (e.g., contractors and volunteers).





# Smoking Control at workplace: NIOSH Recommendation

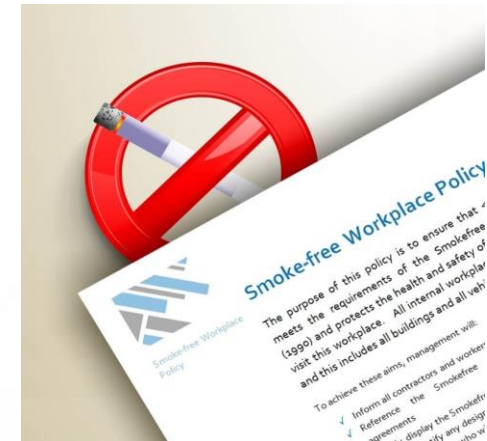
---

- Offer and promote comprehensive tobacco cessation support to all tobacco-using workers and, where feasible, to their dependents.
- Develop, implement, and modify tobacco-related policies, interventions, and controls in a stepwise and participatory manner. Get input from employees, line management, occupational safety/health and wellness staff,...
- Make sure that any differential employment benefits policies that are based on tobacco use or participation in tobacco cessation programs are designed with a primary intent to improve worker health and comply with all applicable national and local laws and regulations.
- Ensure that all workers (smokers and nonsmokers) are aware of the occupational safety and health risks associated with their work, including those that can be made worse by personal tobacco use, and how to limit those risks.



# Smoke-free Workplace: Steps

- Establish a workplace committee
- Involve employees and workers' organizations
- Formulate a written policy
- Communicate the policy to employees
- Provide information and support to smokers
- Determine disciplinary measures
- Follow a time table for implementation
- Provide training



# Smoking and sickness absence: a systematic review and meta-analysis:

Scand J Work Environ Health [2020;46\(1\)](#):5-18

- We found robust evidence showing that smoking increases both the risk and number of sickness absence days in working populations, regardless of study location, gender, age, and occupational class.
- Encouraging smoking cessation at the workplace could therefore be beneficial for employers and employees.

Thank You  
For Not Smoking





## **Job-related stress and tobacco smoking: A systematic review:**

*Journal of Workplace Behavioral Health: Volume 36, 2021*

---

- Findings showed no clear association between job-related stress and smoking status (smoking vs nonsmoking) and smoking cessation.
- However, the findings suggest an association between **job-related stress and changing smoking habits**, toward heavier smoking. Our findings indicate that job-related stress may lead to increased smoking intensity.



# Smoking cessation in the workplace

*Occupational Medicine, Volume 63, Issue 8, December 2013*

---

- Effective interventions in achieving smoking cessation at work:
  - Group behavioral interventions,
  - Individual counselling
  - Pharmacological therapy
- Self-help materials and social support for not smoking (for example support from a spouse, workmate or close friend) were less successful.
- Successful interventions appeared to have comparable effects whether offered in the workplace or in other settings. Workplace settings, however, offer an opportunity to recruit large numbers of smokers who wish to stop





# خلاصه

- محیط‌های کاری فرصتی مناسب برای **حفظ و ارتقاء سلامت** شاغلین می‌باشد.
- تدوین برنامه جامع **کنترل دخانیات برای محیط‌های کاری** ضروری است.
- آموزش و توجیه تیم‌های سلامت شغلی در صنایع و کارخانجات و همچنین کارفرمایان از الزامات این برنامه می‌باشد.

***Thanks for your attention***



***Email: [Rafeemaneshe@mums.ac.ir](mailto:Rafeemaneshe@mums.ac.ir)***



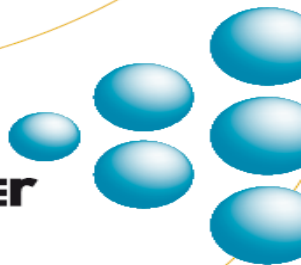
World Health  
Organization

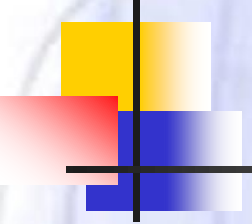
# Smoking

- In 2020, **22.3% of the global population** used tobacco, 36.7% of all men and 7.8% of the world's women.
- Tobacco kills up to half of its users. Tobacco kills **more than 8 million** people each year. More than 7 million of those deaths are the result of direct tobacco use while **around 1.2 million** are the result of non-smokers being exposed to second-hand smoke.
- **Over 80%** of the world's 1.3 billion tobacco users live in low-and middle-income countries.

fresh and alive

mpower



- 
- health-care facilities;
  - educational facilities other than universities;
  - universities;
  - governmental facilities;
  - indoor offices and workplaces not considered in any other category;
  - restaurants or facilities that serve mostly food;
  - cafés, pubs and bars or facilities that serve mostly beverages;
  - public transport.



# Tobacco cessation

The 5As (**Ask, Advise, Assess, Assist, Arrange**) summarize all the activities that a primary care provider can do to help a tobacco user within 3–5 minutes in a primary care setting. This model can guide you through the right process to talk to patients who are ready to quit about tobacco use and deliver advice.

## THE 5 A'S OF TOBACCO CESSATION

A Guide to Helping Patients



Nurses can play a key role in increasing rates of tobacco cessation in communities across the US. Start with the 5 A's: