# **Air Pollution**



WHO Myanmar newsletter special: 9 May 2019

## **Preventing harmful effects of air pollution**

Air pollution is a growing concern globally. An estimated 92% of the world's population are living in places that exceed WHO's ambient air quality guidelines. Air pollution is associated with respiratory and cardiovascular diseases.

Myanmar is facing a double burden of indoor and outdoor air pollution. As in many places, use of fuels for household cooking (kerosene, wood, crop waste), contribute to *indoor* air pollution. Such fuels cause high exposure to pollutants within the household, particularly for women, children, the elderly. Further, they contribute greatly to poor *outdoor* air quality in nearby communities. Urbanization and transportation aggravate outdoor pollution.

Peak episodes of air pollution can result from incidents such as the garbage fire in the Htein



Bin landfill site that happened in April 2018, potentially affecting many communities for the duration of the episode.

This newsletter *special* updates our previous factsheets (of 30 April 2018 and 16 May 2018) covering outdoor and indoor air pollution. <u>https://bit.ly/2GXzP8L</u> and <u>https://bit.ly/2ZV4z2Q</u>

### **Air quality monitoring**

• Air quality monitoring is the technical process of investigating pollutants in the air.



Air quality mornitoring in Yangon Region. 2018. Source: Myanmar CDC, Ministry of Health & Sports

- WHO compiles annual air quality data in a global data base from almost 4,000 cities world wide.
- In Myanmar, key air pollutants are monitored in Yangon and Naypyitaw.
- Data from the monitoring station in Yangon Region are included in the global data base.
- The level of particulate matter (PM2.5) is one of the key indicators measuring air pollution.
- In Yangon Region, the average annual concentrations of PM2.5 are estimated to be 35µg/m<sup>3</sup> (2016). This is higher than the WHO standard guideline for ambient air quality (10µg/m<sup>3</sup>).\*

<sup>\*</sup> WHO air quality guidelines. 2006, WHO HQ.

#### World Health Organization - Myanmar



No 403 (A1), Shwe Taung Kyar Street, Yangon, Myanmar Tel: (95-1) 534300/307, 538620 - 621, 538474 - 476 Fax: (95-1) 538233, 538435 Email: semmr@who.int WHO Myanmar website: http://www.searo.who.int/myanmar

#### to keep us healthy, key messages are:

- Any risk of adverse health impact from air pollution depends on type and level of pollutants, duration of exposure and individuals.
- People with existing respiratory or cardiovascular disease, elderly, infants and young children, are generally regarded more vulnerable to the effects of air pollution.
- Short-term exposure of pollutants can cause acute health reactions, e.g. irritation to eyes, nose and throat, coughing, wheezing and lower respiratory tract infections.
- Prolonged exposure to air pollution, either low or high level, can increase risk of respiratory tract infections, worsen asthma, heart disease, stroke, lung cancer and premature death.
- Reducing and eliminating various sources of air pollution is key to protect public health -- as well as helping to fight climate change.

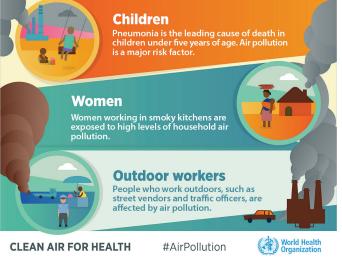
Always important – consult a health professional, or visit a health facility, if you experience any adverse effect which may arise from air pollution.



#### for further details, kindly visit WHO websites:

https://www.who.int/airpollution/household/en/ https://www.who.int/en/news-room/fact-sheets/ detail/ambient-(outdoor)-air-quality-and-health

## air pollution impacting the vulnerable



### What can we do?

Measures to reduce air pollution require broad governmental and societal actions. At the same time, simple measures can be taken by each of us -to help reduce air pollution and prevent exposure:

- **reduce** exposure to pollutants by remaining indoors at times of high outdoor air pollution -- especially important for the vulnerable.
- **close** external doors, windows, to reduce penetration of pollutants from outside -- especially when air pollution is high.
- **avoid** prolonged or heavy physical activity -- especially when air pollution is high.
- **stay** hydrated at all times.
- **prevent** sources of indoor air pollution:
  - do **not** use unprocessed coal and kerosene as household fuel
  - ventilate kitchen spaces well
  - **stop** smoking tobacco
  - **reduce** burning incense inside the home.
- **keep** the inside of the house or office clean by wet mopping.
- **minimize** travel by individual car.
- use well-fitted face masks when exposure to air pollution is high *and* you have to be outdoors for prolonged periods.

WHO Myanmar newsletter special, 9 May 2019