F.No.1-22/Advisory/CDC/2026
Center for Disease Control (CDC)
National Institute of Health, Islamabad
Ministry of National Health Services, Regulations & Coordination
Phone: (92-051) 9255237 Fax: (92-051) 9255099
National Focal Point for International Health Regulations

Subject: ADVISORY REGARDING THE HEALTH HAZARDS OF SMOG AND THE PRECAUTIONARY MEASURES TO BE OBSERVED

BACKGROUND

The attention of all concerned is invited to the recurring incidence of seasonal smog in Pakistan, particularly during the winter months. The phenomenon, comprising fog intermingled with atmospheric pollutants, constitutes a matter of public-health concern. Low temperature, diminished wind movement and other meteorological conditions may impede the dispersion of pollutants and cause their accumulation near the ground, with a consequent deterioration in ambient air quality.

The problem continues to warrant particular attention during the 2026 winter season. Urban and peri-urban populations, especially in areas affected by emissions from transport, industrial activity, domestic fuel use and the open burning of agricultural residue, may be exposed to unhealthy or hazardous concentrations of air pollutants. The attendant health effects include aggravation of respiratory and cardiovascular conditions and an increased demand upon health-care services. The extent and severity of exposure may vary by locality and from day to day; accordingly, the public and the health authorities are advised to have regard to the prevailing air-quality advisories issued by the competent authorities.

PURPOSE

The objective of this advisory is to apprise the health authorities, health-care providers and public, of the deleterious effects which exposure to smog may occasion and to set forth such precautionary measures as may reasonably be adopted for the protection of human health.

PERSONS PARTICULARLY LIABLE TO BE AFFECTED

The following categories of persons are to be regarded as being at greater risk of adverse effects arising from exposure to smog:

- **Children:** Their respiratory systems are still developing and are particularly susceptible to the effects of air pollution.
- **Elderly persons:** Pre-existing illnesses and reduced physiological reserve may render them more liable to complications.
- **Persons suffering from pre-existing respiratory or cardiovascular conditions:** This includes persons with asthma, chronic obstructive pulmonary disease (COPD), cardiovascular disease and allergies.
- **Pregnant women:** Exposure to air pollution may adversely affect maternal and fetal health.

CLINICAL PRESENTATION

Exposure to smog may give rise to, or aggravate, the following manifestations:

- **Respiratory symptoms:** Cough, shortness of breath, wheezing and tightness of the chest.
- **Ocular irritation:** Redness, itching and excessive watering of the eyes.
- **Cutaneous irritation:** Dryness and skin rash.
- **Increased susceptibility to respiratory infections:** Including pneumonia and bronchitis.

PRECAUTIONARY AND CONTROL MEASURES

For the purpose of reducing the health risks associated with smog, the following measures are recommended for observance by individuals, communities and the authorities concerned.

A. INDIVIDUAL-LEVEL MEASURES

- **Restrict unnecessary outdoor exposure:** Outdoor activities should be reduced, particularly during periods when air pollution is at its highest. Children, older persons and persons with underlying illness should avoid strenuous outdoor exertion during such periods.
- **Use suitable respiratory protection:** Where outdoor exposure cannot be avoided, a well-fitted, high-quality N95 or KN95 respirator should be used. Such respirators should be worn correctly to obtain the intended degree of protection.
- **Maintain indoor air quality:** Doors and windows should be kept closed when outdoor air quality is poor. Where available, air cleaners fitted with high-efficiency particulate air (HEPA) filters may be used. Smoking and other sources of indoor air pollution should be avoided.
- **Maintain adequate hydration:** An adequate intake of drinking water should be maintained.
- **Seek timely medical advice:** Persons experiencing persistent or worsening symptoms, particularly difficulty in breathing, chest tightness or exacerbation of an existing illness, should seek medical attention without delay.

B. COMMUNITY-LEVEL AND INSTITUTIONAL MEASURES

- **Encourage cleaner sources of energy:** The adoption of cleaner fuels and renewable-energy technologies should be promoted, with a view to reducing emissions from domestic and commercial sources.
- **Ensure the enforcement of environmental regulations:** The competent authorities should ensure due implementation and enforcement of applicable standards governing industrial and vehicular emissions.
- **Promote public and non-motorised transport:** The use of public transport and, where practicable, non-motorised modes of conveyance should be encouraged so as to reduce emissions arising from private motor vehicles.
- **Undertake public-awareness measures:** Health and other concerned departments should disseminate appropriate information regarding the health effects of smog and the precautions to be observed by the public.

It is incumbent upon all concerned authorities to address the principal sources of air pollution, including industrial emissions, vehicular pollution and the open burning of agricultural residue. Concerted action by the Federal Government, the Provincial Governments and the relevant local authorities is necessary for the improvement of air quality and the protection of public health.

The foregoing advisory is issued for information, guidance and necessary action. The health departments and all other concerned offices are requested to give it wide circulation and to ensure that the precautionary measures herein set forth are brought to the notice of the public.