

Air Quality Health Index



What is the Air Quality Health Index?

To provide more timely and useful air pollution information to the public, the Environmental Protection Department (EPD) launches the Air Quality Health Index (AQHI) to replace the Air Pollution Index (API) from 30 December 2013 onwards.

AQHI informs you of the short-term health risk of air pollution and helps you take precautionary measures to protect your health. AQHI is reported on a scale of 1 to 10 and 10+ and is grouped into five health risk categories.

The AQHIs are reported hourly at each ambient ("General AQHI") and roadside ("Roadside AQHI") station. We also provide AQHI forecast which serves to alert you before the onset of serious air pollution episodes. Relevant health advice is also provided, especially for susceptible groups such as children, elderly and those with heart or respiratory illnesses.

How is AQHI Calculated?

AQHIs are calculated based on the cumulative health risk attributable to the 3-hour moving average concentrations of four air pollutants namely, ozone (O_3), nitrogen dioxide (NO_2), sulphur dioxide (SO_2) and particulate matter ($PM_{2.5}$ / PM_{10}). The risk factors of each pollutant were obtained from local health studies.

Which AQHI ("General" AQHI or "Roadside" AQHI) should I refer to?

The health effects of air pollution depend on the concentrations of the air pollutants and the duration of exposure. Exposure to moderately high pollution levels for a short period of time normally will not lead to significant health problem.

The general AQHI is more relevant to most of us as it represents the air pollution that we are exposed to for most of the time. The roadside AQHI is relevant to those who spend several hours continuously in a day in busy streets.

At present, EPD operates 15 general air quality monitoring stations and 3 roadside air quality monitoring stations. Data from these stations will be used for reporting general AQHI and roadside AQHI respectively. You can check which air quality monitoring station is most relevant to you when visiting EPD's website.



環境保護署

Environmental Protection Department



What actions should I take?

The AQHI system provides different health advice as below for people having different degree of susceptibility to air pollution, including: people with existing heart or respiratory illnesses, children and the elderly, outdoor workers, and general public.

Recommended Precautionary Actions

Health Risk Category	AQHI	People who are sensitive to Air Pollution			
		People with existing heart or respiratory illnesses [#]	Children and the Elderly	Outdoor Workers [*]	General Public
 LOW	1 – 3	No response action is required.	No response action is required.	No response action is required.	No response action is required.
 MODERATE	4 – 6	No response action is normally required. Individuals who are experiencing symptoms are advised to consider reducing outdoor physical exertion.	No response action is required.	No response action is required.	No response action is required.
 HIGH	7	People with existing heart or respiratory illnesses are advised to reduce outdoor physical exertion, and to reduce the time of their stay outdoors, especially in areas with heavy traffic. They should also seek advice from a medical doctor before participating in sport activities and take more breaks during physical activities.	Children and the elderly are advised to reduce outdoor physical exertion, and to reduce the time of their stay outdoors, especially in areas with heavy traffic.	No response action is required.	No response action is required.
 VERY HIGH	8 – 10	People with existing heart or respiratory illnesses are advised to reduce to the minimum outdoor physical exertion, and to reduce to the minimum the time of their stay outdoors, especially in areas with heavy traffic.	Children and the elderly are advised to reduce to the minimum outdoor physical exertion, and to reduce to the minimum the time of their stay outdoors, especially in areas with heavy traffic.	Employers of outdoor workers performing heavy manual work are advised to assess the risk of outdoor work, and take appropriate preventive measures to protect the health of their employees such as reducing outdoor physical exertion, and reducing the time of their stay outdoors, especially in areas with heavy traffic.	The general public is advised to reduce outdoor physical exertion, and to reduce the time of their stay outdoors, especially in areas with heavy traffic.
 SERIOUS	10+	People with existing heart or respiratory illnesses are advised to avoid outdoor physical exertion, and to avoid staying outdoors, especially in areas with heavy traffic.	Children and the elderly are advised to avoid outdoor physical exertion, and to avoid staying outdoors, especially in areas with heavy traffic.	Employers of all outdoor workers are advised to assess the risk of outdoor work, and take appropriate preventive measures to protect the health of their employees such as reducing outdoor physical exertion, and reducing the time of their stay outdoors, especially in areas with heavy traffic.	The general public is advised to reduce to the minimum outdoor physical exertion, and to reduce to the minimum the time of their stay outdoors, especially in areas with heavy traffic.

In addition to following the general health advice above, you may also make adjustments to your physical activities according to your health conditions. As the health effects on individuals may vary, you should seek advice from a medical doctor if you are in doubt or feel uncomfortable. If you are a smoker, you should quit smoking now!

* The advice does not apply to outdoor workers who are sensitive to air pollution.

Such as coronary heart disease and other cardiovascular diseases, asthma and chronic obstructive airways diseases including chronic bronchitis and emphysema.



How Can I Get Information on AQHI?

Information on AQHI and its forecast is regularly reported in newspaper, radio and television. You can also obtain the latest information from the following channels:



www.aqhi.gov.hk



"AQHI" app on smartphone



2827 8541

