

Making Sense of Hong Kong's Air Pollution

By Mary Alice Haddad

WE'VE ENTERED the season of bad pollution, but everyone seems to have a different idea of what is “bad” and what to do on a “bad” day.

First, do you really need to worry if the air quality is bad? Maybe. If you are in a vulnerable category (i.e., you're very young, very old, suffer from asthma or are recovering from a respiratory illness), then you should be careful. For people whose lungs are not operating at full adult capacity, even a single day of bad air can cause long-term health problems. Those people should do their best to reduce their exposure during moderately bad days and avoid going outside on bad days. If they must go out, wearing a mask is a good idea.

For the rest of us – older children and adults with healthy lungs – you can think of air pollution as similar to other bad things in your environment: negative health effects come from cumulative exposure. Just as is the case with a giant bacon cheeseburger or a bottle of wine, if you have one every day, bad things will happen to your body over the long term. However, if you have only one a year, your body will have no difficulty dealing with it.

Air pollution is similar – your health risks rise with exposure. Thus, if you are a short-term resident of Hong Kong, it might not matter at all, but if you have been here for 10 years and are planning to stay for 10 more, be a bit more careful when pollution levels are high. Think about taking the through-the-buildings route to lunch, traveling by MTR instead of driving, picking a different day for that Dragon's Back hike, and putting on a mask, especially if you're going to be out for a while.

Is today a “bad air” day? Oddly enough, this question is not as easy to answer as one might think because there are so many different websites and apps and so many different definitions. The majority of apps pull their data from the same source, Hong Kong's Environmental Protection Department, but different apps rate the risks differently.

One good website (when it is working) is **The Air You Breathe** (theyouyoubreathe.com), which offers a comparison

of how different entities (e.g., WHO, the U.S., the U.K.) rate Hong Kong's air on any particular day.

The official Hong Kong EPD app is **AQHI** (aqhi.gov.hk/en.html), which pulls data hourly from its 16 air quality stations and has an easy-to-read map as its main interface. For more detailed information, my favorite app is **AQICN** (aqicn.org/city/hongkong). It was developed by the World Air Quality Index Project (WAQI), which gathers data from 10,000 stations worldwide and uses a unified scale to rate the air quality.

The app is not very sophisticated, but it allows you to pick a home station and then displays all of the measured air pollutants (e.g., PM2.5, SOx, ozone, etc.) for that station. The **WAQI website** (<https://waqi.info>) offers excellent world pollution maps and extensive information about air quality.

Another useful app is **PRAISE** (praise.ust.hk), which was developed by a team at Hong Kong University of Science and Technology. It has a friendly interface that offers basic information about today's weather and pollution on the front screen, and also includes pollution forecasts and regional maps. By the end of 2019 it will offer “clean air route” suggestions for travel as well as calculate your personal pollution exposure levels.

Other good apps include **Air Matters** (air-matters.com/index.html) and **AIR by Plume Labs** (plumelabs.com/en/air/). As mentioned above, all of the apps contain essentially the same data, so your choice will be largely based on which interface you prefer.

Two important things to keep in mind: 1) Even though our data makes pollution more obvious now, Hong Kong's air quality is actually better than it was ten years ago; and 2) our air is often better than what our friends in other countries might have (for example, today New York City has worse air than we do), but they're not checking. So use the apps to check and respond appropriately, but don't let fear of bad air force you to stay inside all the time – spending all day in front of the TV has its own bad health consequences.

