

Air Quality Management at The British School New Delhi

A city as beautiful as Delhi has, unfortunately, been in the news for the wrong reasons in the last few years. Air pollution is a major issue in this part of the world and the WHO called Delhi the world's most polluted city in 2015. As awareness of this issue has grown we have learnt that exposure to air pollution in the early years can have an impact on young lungs. Exposure to high levels of Particulate Matter (PM) has a long-term health impact. Also, recent studies from Harvard Medical School show us that elevated levels of CO₂ in classrooms combined with other pollutants leads to lower cognitive scores.

At The British School we are committed to providing a safe and healthy learning environment for our students. We have engaged with a leading consultant for air quality in New Delhi and have undertaken the following initiatives:

- **Created an Air Quality Task Force** looking at managing the impact of Air Quality for students and staff.
- **Organised awareness sessions** for students and parents to help them understand the impact of air pollution and ways for manage its impact
- **Changed the school calendar** to extend the Diwali and Christmas holidays when pollution is at its highest, and altered the summer holidays to accommodate this change
- **Closely monitored performance of our embedded Treated Fresh Air Units (TFAs)**. We have 12 TFA filter systems with multiple layers of filtration embedded within our new buildings to bring down pollution levels in classrooms learning all indoor areas. A regular maintenance regime means that our filtration system is always working effectively.
- **Continuously monitored Air Quality in our buildings**: We have installed real time Air Quality Sensors in our classrooms to monitor PM_{2.5}, PM₁₀ and CO₂ levels. We are now working on making data from these monitors accessible to all parents.
- **Use industrial grade reference monitors to ensure that our system continues to work**: We check our monitoring systems periodically with a top grade industrial reference monitor to ensure it remains accurate.

Air Quality Policy for Outdoor Activities

We follow the Air Quality Index (AQI) designed by US Environmental Protection Agency (EPA) for Particulate Matter (PM_{2.5}) to determine how polluted the ambient air is. AQI readings are monitored prior to, and regularly throughout, the school day.

We have a clear outdoor policy which is communicated on campus every day with coloured flags. We restrict outdoor activities when pollution levels are too high to protect students and staff from the health impact known to be associated with cumulative exposure to particulate matter.

We have a simple two-category system to determine whether students' outdoor activities will be restricted or not. If the AQI is 250 or over, students' outdoor activities and play will be limited, while at lower AQI levels there will be no limitations. On AQI 250+ days red flags will be displayed in prominent locations around campus ('red days'), and a message will be posted on firefly. When AQI is lower than 250, yellow flags will be displayed to communicate outdoor activity can take place.

The outdoor activity schedule is managed carefully to minimize the impact of this on our students. For example, we use a range of indoor spaces in the school to allow students physical activity during red days.

We are continuing to work on our air quality policy through the Air Quality Task Force which includes members of the schools' Senior Leaders, Governors and parents. If you are interested in this topic and would like more information, please contact the school at thebritishschool@british-school.org.