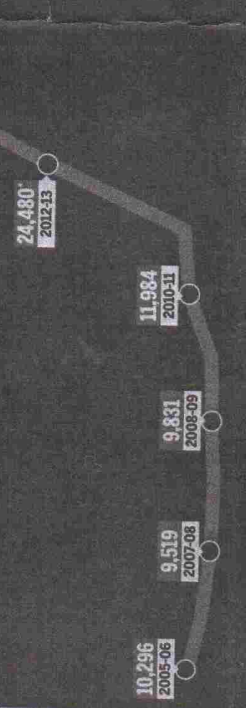


# Leave Delhi

That's what doctors are prescribing to a record surge of patients with serious respiratory ailments triggered by the city's toxic air

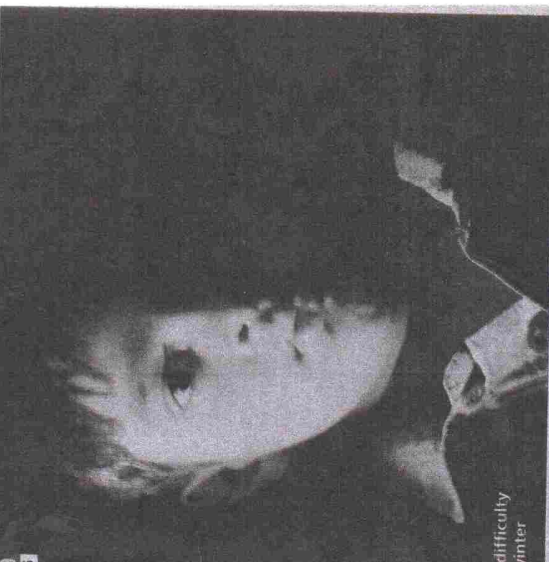
## WHAT NO ONE CHARTED: 300% JUMP IN CASES AT AIIMS OPD, RESPIRATORY WARD

Records accessed by *The Indian Express* show how the number of OPD cases of respiratory ailments at AIIMS has been rising since 2006-07 — to an average of over 100 a day now



**NAME:** VAIBHAV SHARMA  
**AGE:** 13  
**Home:** Sahibabad  
**Ailments:** Suffers from allergies, chronic cough and breathing difficulty  
**Life:** Forced to skip school often, needed 3 hospital visits this winter

PHOTO: K. KHANNA



11-time rise in ICU cases at Patel Chest Institute; pollution not only affects lung function, it hits blood pressure levels too

**PRITHA CHATTERJEE**  
NEW DELHI, MARCH 31

**J**AMIL, Iqbal Gang and Meera Prasad, don't know that the killer dust in Delhi's air, RSPM (respirable suspended particulate matter), began falling after CNG was introduced and then, seven years ago, took a treacherous U-turn for the worse.

What they know is that their children cough and wheeze into each night — Jamil lost his first child to pneumonia — and after sev-

### Business as Usual

By UNNY



eral trips to the hospital, there's only one advice doctors have for them:

Leave Delhi. Easter said than done, of course, but that advice betrays the sense of despair in the city's health establishment over public policy failing to respond to a public health disaster in the making.

Records investigated by *The Indian Express* from the Out Patient Departments (OPD) of Delhi's leading hospitals show that after the Supreme Court order of 1998 led to public transport vehicles switching to the cleaner CNG fuel, the two

main hospitals handling a bulk of respiratory ailments reported a clear dip in cases. Like the RSPM curve, which this investigation mapped yesterday, the number of OPD cases at the Vallabhbhai Patel Chest Institute (VPCI) and All India Institute of Medical Sciences (AIIMS) hit a low a few years after that verdict. Then, they started to spike, as RSPM levels rose from 161 µg/m<sup>3</sup> (microgram per cubic metre) in 2007 to 316 µg/m<sup>3</sup> in 2014.

Delhi air made Kejriwal ill, says Bangalore doctor

**HARSHA RAI GAITY & PRITHA CHATTERJEE**  
BANGALORE, NEW DELHI, MARCH 31

**FOR** Delhi Chief Minister Arvind Kejriwal, cleaning up the capital's air presents a political challenge — with a personal dimension as well. The high pollution level in Delhi is one key reason why Kejriwal — with his persistent cough — was forced to go for a "detoxification" programme at the Jindal Institute of Nature-cure in Bangalore last month, doctors who treated him told



'Was exposed to high level of pollution'

*The Indian Express* today. (He was exposed) to the high level of pollution from vehicles, dust, smoke and factories, especially during the election campaign when he was

CONTINUED ON PAGE 2

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Indian Express  
(1<sup>st</sup> April, 2015)  
Delhi Edition



# We can never forget the sound or sight of our girl struggling to breathe'

Consider these:

**VPCI:** The number of OPD cases dipped from 51,694 in 2003-04 to 47,887 in 2006-07 and then started rising to reach an all-time high of 65,122 cases in 2013-14.

**AIIMS:** The trend is similar, from 10,296 OPD cases for respiratory ailments in 2005-06 to a low of 9,519 in 2007-08 and again, an all-time high of 37,669 in 2014-15.

To place that last figure in context, AIIMS started a separate respiratory department in 2013.

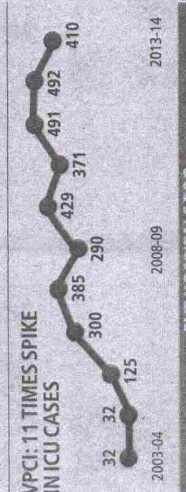
Admitting that these numbers are cause for serious alarm, Dr. Randeep Guleria, head of respiratory medicine, AIIMS, told *The Indian Express*: "What is most worrying is that 10-15 years ago, when air pollution levels had come down, our average OPD attendance and admissions in respiratory medicine at AIIMS saw a decline of about 20%. We seem to have lost out on our own achievements. As our public health success has been reversed."

Dr. Rahul Nagpal, paediatric chest specialist at Fortis VK, said, "I have lost count of the medical certificates I have written for schoolchildren this winter. As a doctor, I am often forced to advise holidays to patients because a change of environment with better air quality helps them improve faster."

What's needed, says Dr. Guleria, is action at the policy level. "The poor air quality has persisted for too long, and there is enough evidence of its link to health effects. It is time that we see some policy action

**THE 3 DEADLY MONTHS**  
The city's two main hospitals treating respiratory cases have recorded a spike in cases, recorded at their OPDs over the last three years during October-December when winter sets in:

VPCI	2012	2013	2014	2013	2014
	16,604	16,859	16,759	5,159	8,135
AIIMS				8,135	9,378



Private hospitals have provided data on the rate of increase in respiratory cases recorded in October-December 2014 compared to cases recorded in July-August in the same year.

Hospital	Increase (%)
SIR GANGA RAM HOSPITAL	35%
BLK MEMORIAL HOSPITAL	30%
MEDANTA, GURGAON	30%
KAILASH HOSPITAL, NOIDA	25%
FORTIS, GURGAON	16%

But now, data shows, pneumonia, heart failure) and mortality. The doctors said that in very serious cases, they almost always remind the patient of the option to move out of Delhi.

Dr. Rajendra Prasad, director, VPCI, said that this is the time "when we see more of patients with chronic or long-term respiratory diseases like Asthma and Bronchitis having complications". Data from the institute shows that the number of patients admitted to its respiratory wards increased by 79% — from 2,160 cases in 2003-04 to 3,873 in 2013-14.

"The admissions and emergency cases are reflective of such exacerbation in symptoms. So in our experience as a tertiary care hospital, which sees more referrals of complicated cases, air pollution not

## '9 YR OLDS WITH SMOKERS' LUNGS'

**"Over the years, as X-rays will show you, lung function has deteriorated so much that now 9-10-year-olds have lungs of chronic smokers."**

— DR S K CHHABRA  
Consultant in pulmonary and critical care, VPCI

**"Some patients required ICU admission and some of the elderly even succumbed to severe respiratory failure. This trend is going upwards."**

— DR VIKAS MAURVA  
Senior consultant, respiratory medicine, BLK Super Speciality Hospital

**"This winter was especially bad. Those with acute conditions took longer to cure with complications like bronchitis or pus formation, and pneumonia."**

— DR SUDHIR GUPTA  
Kailash Hospital, Noida

**"Lung function has deteriorated. Earlier, if at a certain age we expected 80% lung function, that has now deteriorated to 60%."**

— DR MANOJ GOEL  
Director and head of pulmonology department, FMRI

## 398 medical colleges in India, 1 course for environment science

PRITHA CHATTERJEE  
NEW DELHI, MARCH 31

AN estimated 20 million people breathe the air that is the worst of any city in the world, patients young and old are streaming into hospitals with respiratory ailments at a rate growing like never before. Two tiny rooms and a staff of seven is all that's there in the entire country to study why people are falling ill and what can be done.

Welcome to these dimly lit rooms on the ground floor of the Maulana Azad Medical College (MAMC), home of the only course on Occupational and Environmental Health among the 398 medical colleges listed on the official website of the Medical Council of India.

One of those rooms is the workplace of the Centre's director Dr T K Joshi, and the other, of its six other staff: an epidemiologist, a

field investigator and four administrative staffers.

According to Dr. Joshi, that the aim of their three-month course for doctors is to address the "dire shortage" of indigenous research on environmental health in India. But he admitted that it has not really taken off due to a combination of factors, including the apprehension that it "does not add to your employment value".

Since it was set up in 1998, over 1,000 doctors have completed the December-February course and obtained a Certificate in Industrial Health, which is recognised only by the Ministry of Labour and not by MCI.

"We get faculty members from the US, UK and other countries that are doing a lot of work on environmental health and who come on their own expense

because they are passionate about the discipline. But our funds are strained so there is no investment for a separate research wing," Dr. Joshi told *The Indian Express*.

"It has been clear since the beginning of this century that environment would be a major determinant of public health. To meet environmental health challenges from exposure, you need baseline data, but we have seen negligible government attention in this critical field," he added.

According to Dr. Joshi, one reason why this course never really took off was lack of "incentive". "It has been restricted to a purely academic pursuit. If we had set up at least 40 such departments in the last decade we would have produced so much research, which would in turn have forced the industry also to open up," he said.

## Delhi air made Kejrwal ill

travelling around the city," said Dr Babina Nandakumar. "That might have caused accumulation of toxins in his body and that required immediate attention."

Kejrwal was at the institute from March 6 to 16. Although he was primarily diagnosed with high blood sugar level and a chronic cough, doctors said they found living conditions in Delhi as one of the factors responsible for his ill health.

There could be a silver lining to this, says M C Mehta, the petitioner in the

## Minister responds: prod needed for Delhi govt

EXPRESS NEWS SERVICE  
NEW DELHI, MARCH 31

ON the day *The Indian Express* launched an investigative series on the air quality in Delhi, Environment Minister Prakash Javadekar said it was good that the media was highlighting the issue as it would force local authorities to take urgent action to curb pollution.

"It is good that some newspapers are taking up real issues related to air pollution. I welcome this scrutiny.

government on issues like this. It was not just about air pollution but also about sewage treatment and management, and garbage collection. The Delhi government was supposed to submit an action plan to us by today. But we have not yet received the action plan. In Delhi, the Delhi government is in-charge. They are the implementing agency," he said.

However, he claimed his ministry was actively working on improving air quality not just in Delhi but across