

# **Don't Hug Me Mom, I Can't Breathe Well A Saga of Indoor Pollution**



Her name is Saakshi, age 7. She lives in a remote village of Tamil Nadu, India with her parents and a younger brother. Her mother and father love her so much and care her a lot. She belongs to a social class where nothing is in abundance except love and care. They poor souls don't have that much sense to understand simply love and care can't keep their kids happy. They have faces to smile but don't have any reason to smile. They have legs to dance but don't have any reason to dance. Their only activity in life is to manage two-time meal and continue living in a house coming in same poor condition from their forefathers.

## **What's wrong with Saakshi?**

Now let's talk about Saakshi. She is fond of playing outside home. This is the only way she has to stay away from suffocation of her home. She has to eat whatever is given to her and drink water without worrying about its quality. A few months ago a strange thing happened in their home. Now her father and mother have to love her with care. Now even they can't express their love to her so warmly; which means now they can't give anything in abundance to their beloved daughter.

## **Warm expression of love is prohibited**

The reason is; once her mother hugged her in affection she protested on her mother's tight hug and asked her not to do this again because she can't breathe well. This was so worrisome for both mother and father. They took her to nearby dispensary where they were shocked to know their beloved daughter is suffering from acute asthma because of inhaling huge amount of smoke persistently for the last two years. Pediatric asthma rate increased almost 73 per cent in an advance nation like USA while in poor region you can well imagine how higher it can be.

## **Worst enemy of women folk**

Where from this smoke comes to their house? They live in a village so there is no question of vehicular emission there. This is because of indoor pollution. They don't have any gas stove and have to rely on coal, wood, crop refuse and dung as a fuel for cooking their food. She with her mother stays home longer than father and brother so quite earlier she became victim of one of the main diseases caused by indoor pollution.

Secondly because of being child she was most vulnerable to this strange type of pollution that is worst enemy of families and more particularly of women folk. Now they don't have choice but to take more care of her. Despite her suffering from asthma they can't afford to take any practical step to reduce indoor air pollution. They still have to rely on biomass and coal for cooking food because they can't afford any costly gas or kerosene oil stove nor they can afford to buy any alternative fuel.

## What is the most harmful aspect of indoor pollution?

This is the only form of [pollution that can impact](#) more than other forms. People stay at home longer than the period they remain outside because of job, business or education. They remain vulnerable to this form of pollution for a longer period of time. So it has more time to play havoc with households. Kids become its worst victims. That is why increase in pediatric asthma cases is alarmingly high all over the world.

## Half population of world vulnerable to indoor pollution



Half of the population of the world use coal, wood, crop waste and dung for their energy needs. It is feared till 2030 total 60 per cent population of the world will be depending upon biomass fuel because of rising poverty level across the globe.

Most of the population that relies on biomass fuel lives in Asia and Africa. South Asia is glaring example of the region where poverty is rife and more than half of its total population use smoke emitting stoves to cook food and boil water. Women go outside that is why they are

most vulnerable to this type of pollution. Little girls are equally more vulnerable because of their weaker immune system.

## 2 million people die every year because of indoor pollution

According to WHO two million people of poor regions of the world die prematurely because of their exposure to this form of pollution. The [health effects](#) of indoor pollution is not asthma only it can also cause several other lethal diseases including lung cancer, cataract in eyes, respiratory disorders, weakening of nerves, bronchitis, throat infection, pneumonia and eye irritation. Frequent headache and dehydration are also most common diseases because of indoor pollution.

## 4<sup>th</sup> most harmful pollution

According to US Environmental Protection Agency, indoor pollution is the fourth [most harmful pollution](#) in Europe and USA while in poor regions of the world including Asia and Africa its rank may still be higher. In most of the poor regions nearly 75 percent households cook food by burning wood, crop refuse, animal dung and even rubber garbage that emit smoke a lot which spread in the whole house.

## Types of indoor pollution

There are basically three main types of indoor pollution including:

**Indoor air pollution** that comes from kitchen emissions, vehicular emissions from nearby road, radon gas resulting from radioactive decay of radium, [ozone](#) gas () that comes directly from sun with ultraviolet rays because of depletion in ozone layer and other small dust particles from inside house.

**Indoor land pollution** comprises of dust, particles, food refuse that stick into small wedges, holes of furniture and other items and keep changing its scientific composition and creates more hazards for the household.

**Indoor water pollution** that is created if any seepage occurs in drainage pipes and sometimes it mixes into water supply line. In poor regions this is a common problem and household cannot find it because of concealed linings and just keep on complaining of poor quality of water.

**Indoor noise pollution** that is under control of households and comes from music player, TV sound, unplanned and frequent masonry work etc

## Main sources of indoor pollution

The main sources of indoor pollution can be divided into two broad categories.

- Main made sources
- Natural sources

### *Man-made sources of indoor pollution*

It includes;



**Kitchen emissions** are main source of indoor pollution that are created as a result of cooking on low quality stove or by burning wood, dung, and crop refuse. It is quite natural that any type of combustion will emit carbon mono oxide but the wrong ventilation and no any exhaust installation in the kitchen pollute the whole house.

**Cigarette smoking** inside home or doing it standing quite near to the home

**Use of spray of any type** that contains benzene, methylene chloride and perchloroethylene gases

**Pesticide and chemical fertilizer** used for gardening and planting also creates indoor air pollution

**Asbestos** a chemical used to cool the roof but it emits quite harmful gases. Direct contact with it may cause skin cancer

**Lead** is another source of indoor pollution that contains in wall paints and lowers down the IQ level of households if it is in huge quantity in the paint

### ***Natural sources of indoor pollution***

**Radon**; it is an invisible gas that results from radioactive decay of radium and usually found in building material

**Ozone gas** that comes from sunlight with ultraviolet rays because of depletion in ozone layer, it may cause skin cancer if falls persistently on skin of households.

**Mold and other allergies** that are emitted from plants and grass; they may disturb the smooth breathing of households.

### **Non-scientific causes of indoor pollution**

**Poverty**; because households can't afford to construct proper ventilation from home and can't afford to buy high quality stove.

**Unawareness**; they don't know long term negative effects of this menace and defer to take protective measures against it and keep diverting their attention to solve other problems related to their home.

**Busy lifestyle**; in urban areas almost all the households remain busy in their jobs and education. No one has time to think about maintaining home safe from pollution coming from within the home.

**Rented homes**; people living in rented home don't like to spend money to be safe from this type of pollution and look to landlord for remedy who also pass the buck on renters.

## **Main diseases caused by indoor pollution**

Every year two million people die due to various types of indoor pollution. Death count in poor regions is quite higher. Out of total number of deaths

- 44% are due to pneumonia
- 54% from chronic obstructive pulmonary disease (COPD), and
- 2% from lung cancer

Among non-fatal diseases because of this menace include:

- Asthma that is highest in children
- Eye irritation
- Frequent headaches
- Nose and throat infections

## **Social impacts of indoor pollution**

- Households get irritated on trivial and resort to brawl with each other.
- Children don't like to stay at home and keep playing with kids outside home and may involve in bad habits.
- Women productivity decreases a lot and they fail to become helping hand of their husband.
- People affected by indoor pollution like to stay away from home and their family structure remains weaker devoid of strong bonding with each other.

## Interesting aspect of indoor pollution control



This is one of the few types of pollution where role of green laws and regulators is next to nothing. Communities and households have to play key role to control it. One cannot blame any government agency for not controlling it. It means if it is rising all over the world communities are mainly responsible for it. With a little effort this can easily be controlled at its source.

## How to control indoor pollution

Improvement comes from within. It is the golden rule to follow while controlling indoor pollution. It is the only form where regulator and green laws have least to do. Most of [its control depends upon household](#) and their will to take it seriously and keep their kids free from any of its harms.

- House must have cross ventilation that means air comes in home but does not stay and keep moving

- There must be exhaust in kitchen that emits air outside home. For this purpose kitchen's one wall must be the outer wall of the home
- Apart from regular cleanliness an organic fumigation (not of chemicals) of the whole house once in six months is must
- Those who can't afford to buy gas stove in poor regions should shuffle their priority and instead of saving money to buy a TV or fridge first buy a high quality stove because its absence is more troublesome than that of TV or fridge
- Get carpet's cleaning regularly
- Apart from daily cleanliness of home do weekly cleanliness to remove all rubbish from the place where simple mob does not reach
- Put ban on smoking inside home to save your kids from this cancer-causing habit because those who stay near to smoker equally inhale same amount of smoke of the cigarette
- Use organic insecticide spray to remove the insects
- Plant Asparagus, Ivy, Cacti, Chlorophytum, Clivia, Monstera, Pachira trees in your courtyard as all of them improve the air quality and refresh it while Asparagus kills bacteria.
- Before buying a spray must check if it does not emit poisonous gases including benzene, methylene chloride and perchloroethylene
- Keep multiple head phones in home so that those who don't want to listen music do not get disturbed.
- Apart from replacing the biomass fuel with alternative fuels including LPG gas, bio gas, solar stove etc there is also need of raising awareness on harms of indoor pollution to

convince people switch from using conventional smoky fuel to relatively less smoky alternative fuels.

You may also read my another article on [how to control indoor pollution](#)

## Preventive measures

- To keep your kids safe from harms of indoor air pollution more particularly you must be aware of what asthma is, what its main causes are and how to be safe from it. You can [visit this site](#) for more details.
- You should know what [smoke free](#) is and how to adopt smoke free living so that you can buy products least harming to your indoor environment.
- To learn what healthy housing is and how you can manage it, [here is a proper guide](#) for it.
- You can also have a look at various [solar energy household products](#) to select the one which you need most and can afford from your budget.
- [Organic cleaning products](#) are better than the chemical products and keep your home from a key source of indoor pollution

## The end

Now come back to Saakshi. She is living with her parents and being treated in a local hospital of their area. Asthma is one of the few diseases where prevention works more effective than medication. Her parents have to take all preventive measures to let her least suffer from breathing problem. They can't do anything but to keep her away from fireplace and don't take her to any place where smoke is high. Their poverty level is the main bottleneck to let them avoid this type of pollution. In most poor regions of the world people are suffering from various from of pollution because of their poverty. But very few of us know that it is pollution that worsens poverty and eventually leads to community towards abject poverty. We can hope for

better simply in words but practically we must play our role to improve our environment for a safer life.



What else do you think should be done to control various types of pollution? Please share your comments at [Pollution Pollution](http://PollutionPollution) because sharing of our views will create our collective voice against environmental degradation. Sooner or later all those will hear our voice who are responsible to make this world a safer place to live.

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