

HEALTHY LUNGS, HEALTHY BODY



"IF YOU CAN'T BREATHE, NOTHING ELSE WORKS"

For more information, please contact your nearest health facility









LUNG HEALTH

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It is important to keep our lungs healthy.

What is a lung?

- The lung is an organ that enables us to breathe in and out. It is where exchange of air takes place.
- Lungs are found in the chest and are responsible for breathing.

How lungs develop

- Lungs start forming at 11/2 months inside the womb
- Air sacs form by 61/2 months and keep increasing in childhood.









LUNG HEALTH

What can damage our lungs?

- While In the womb, the lungs of the baby can be damaged from:
 - Infections
 - Smoke of cigarettes (even other people smoking)
 - Smoke from cooking
 - Smoke from tadooba, lanterns
- Infections. E.g. Tuberculosis, Pneumonia, bronchitis and others which include asthma and Chronic Obstructive Pulmonary Disease (COPD).
- Inhalation of harmful substances such as cigarettes/tobacco smoke, second hand smoke, cooking smoke, lighting smoke (tadooba and lanterns), fumes/smoke from auto- movable engines for example cars and motorcycles, burning bushes, grinding mills, factories and construction materials.

People whose lungs can easily get damaged include:

- Those with low immunity due to chronic illnesses
- Malnourished people
- Very young children
- Very old people

Preventing lungs from damage/harm

- Vaccination (TB, pneumonia)
- Early recognition and treatment of infections
- Good nutrition(Proteins, Energy, Fresh fruits and vegetables)
- Good housing
- Avoid dusty/fume environments
- Stop smoking
- Stop bush burning
- Avoid using paraffin lighting e.g. tadooba for lighting
- Avoid staying in smoky areas,
- Use of improved cooking stoves, dry fuel



What is tobacco smoking?

- Tobacco is an agricultural crop/ plant, most commonly used to make cigarettes.
- Tobacco smoking is the practice of burning tobacco whether processed or not and inhaling the smoke from it.
- Tobacco contains nicotine, a substance that makes people addicted (dependent), and they cannot stop
- When tobacco users stop, they feel sad and develop withdrawal symptoms such as:
 - Feeling irritable, angry, or anxious.
 - Having trouble thinking.
 - Yearning for tobacco products.
 - Feeling hungrier than usual.

 Tobacco contains 4000 chemicals, 500 poisons and 40 Cancer causing agents which damage health such as causing cancer, oral diseases and stroke.



What are the different ways Tobacco is used?

Ask the patient/community if they have seen these different tobacco products and what they know about each product.

There are many ways in which people use tobacco such as chewing, water pipe, sniffing.

Explain about each

- Cigarette- a small paper tube filled with cut pieces of tobacco, which people smoke. These are processed from factories and sold as either single stick or packs.
- Roll your own cigarettes also called RYO, MYO, rollies, roll-ups burns, hand-rolled cigarettes or simply rolls refers to cigarettes made form loose tobacco and rolling paper. These are sold in pouches or as tins of tobacco sometimes containing rolling paper or tubes
- E-cigarettes. It's a cigarette shaped device lit using a battery which contains a nicotine based liquid that is heated and inhaled to stimulate

the experience of smoking tobacco.

- Traditional pipe-tobacco is placed in a small dish connected to a pipe then lit up, produces smoke which penetrates through the pipe and sucked through the mouth.
- Water pipe/shisha- also called hookah, narghile or hubble bubble smoking – is a way of smoking tobacco which is sometimes mixed with fruit or molasses sugar through a bowl and hose or tube. The tube ends in a mouthpiece from which the smoker inhales the smoke from the substances being burnt into their lungs.
- Cigars- these tubes are made from dried and rolled tobacco leaves, which people smoke.
- Snuff- This is ground tobacco and inhaled through the nose.
- Chewing. Tobacco that is directly chewed through the mouth



What are the effects of tobacco smoking?

Smoking tobacco puts you at risk of developing diseases like Tuberculosis, lung cancer, Chronic Obstructive Pulmonary Disease, heart attacks, oral and throat cancers.

Effects of tobacco smoking to pregnant women

- Reduction in baby's lung growth
- Premature babies, stillborn babies,
- Miscarriage
- More acute respiratory tract infections
- More infant deaths
- Damages defense mechanisms even in early life
- Aggravates chronic lung diseases like asthma with more attacks

Associated effects

- Tobacco growing is expensive
- Growing tobacco reduces food production
- Deforestation for wood used to cure tobacco leaves
- Damage to environment from fires from cigarette butts
- House fires & bush fire
- Air pollution



What you can do to reduce smoking

Because of addiction, smokers need help to stop smoking. Use the guideline below:



*Adopted from NHS Centre for Smoking Cessation and Training

Before cessation



After cessation



Benefits of quitting smoking

- After 20 minutes: Your blood pressure and <u>pulse</u> decrease. The temperature of your hands and feet increases.
- After eight hours: The carbon monoxide level in your blood returns to normal. Oxygen levels in your blood increase.
- *After 24 hours:* Your chance of <u>heart</u> <u>attack</u> decreases.
- *After 48 hours:* Your ability to taste and smell starts to return.
- *After 72 hours:* The bronchial tubes (airways) relax.
- *After two weeks to three months:* Your circulation improves.
- After one to nine months: Improved lung's ability to handle mucus clean itself, and reduce infection. <u>Coughing, sinus</u> <u>congestion, fatigue</u>, and shortness of breath also decrease.
- After one to five years: Your risk of dying from <u>heart disease</u> is cut to half that of a lifelong smoker's risk.
- After 10 years: Your risk of dying from lung cancer drops to almost the same rate as that of a lifelong nonsmoker. Your risk for mouth, larynx, and other cancers decreases.

Evaluation Session

What shall we do?

The discussion is: what can we do?

- Do you understand that tobacco smoke is a danger to your health?
- How can we make a difference here?

How can we find a solution to avoid exposure to tobacco smoke?

- Implementation of strict rule and regulations governing the production and consumption of tobacco products such as health warnings to cover at least 50% of display areas of all tobacco products packages.
- Implement non-smoking zones in public places
- Avoid peer groups especially the youth.
- Providing counseling and addiction treatment to smokers
- Educating the community about the dangers of tobacco and any other form of smoke to their health.

Who will do it?









What is biomass smoke?

Biomass smoke is that smoke generated from burning plants and animal materials for lighting, cooking or heating such as wood, grass, crop residues, cow dung, charcoal domestic and medical wastes.

What are the dangers of biomass smoke?

Biomass smoke causes very many damages to the human body as categorized below:

In children

- Intra-uterine growth restriction(Fetal retardation)
- Low birth weight (small babies)
- Lung infections like pneumonia
- Reduced lung growth
- Worsening symptoms of asthma
- Infant death

In adults

- Lung diseases like Chronic Obstructive Pulmonary Disease (COPD), Tuberculosis, worsening of asthma, lung cancer, and lung stiffness
- Heart diseases, and eye diseases like cataract.
- Increase risk of AIDs.
- Maternal deaths.
- Others.
- Financial loss during care.
- Death.





How to control biomass smoke

Recommended equipment	Living environment	User		
 Chimney-less improved biomass stoves Improved stoves with chimneys 	 Improved ventilation Raised fireplaces Windows/ventilation holes Kitchen design and placement of stove Shelters/cooking huts 	 Improved ventilation Raised fireplaces Windows/ventilation holes Use 	 Improved ventilation Raised fireplaces Windows/ventilation holes Reduced end through op source Fuel dryin Use of point 	 Reduced exposure through operation of source Fuel drying Use of pot lids
Brigettes and pelletsCharcoalParaffin stove		Good maintenanceSound operation		
 Liquid Petroleum Gas (gas cylinder) Solar cookers (thermal) 	Stove at waist heightKitchen with chimney	Reductions by avoiding smokeKeeping children out of smoke		
Electric cookerEfficient housingSolar water heating				



Retained-heat cookers



Energy-saving stoves



Eaves spaces and smoke hood



Upesi stove



Short-term solutions

Retained-heat cookers

- The "fireless cooker" uses stored heat to cook food over a long period of time. The food is cooked on a traditional stove, before it's transferred to the fireless cooker. The cooker is well insulated, keeping the heat in the food and allowing it to continue cooking inside.
- A simple basket, insulated with local resources such as banana, leaves or old clothes, can reduce fuel use by 40%, preserving food and saving people hours

of precious time.

Energy-saving stoves

- What you need is a mix of soil (80%), clay (10%) and sand (10%), and 2 drain pipes.
- Uses a third of wood burnt in an open fire, and can be made in home with a chimney through the wall of the home.

Behavioral changes

- Sharing knowledge about the dangers of smoke.
- Drying the wood (wet wood causes more smoke)
- Keeping children away from the fire.
- Using pod lids.
- Cooking outdoors.

Mid-term solutions (low- or medium-

cost) are plancha cookers, rocket stoves, solar cookers (panel cookers, box cookers and parabolic cookers), advanced biomass stoves (forced air stoves and gasifier stoves), and improving ventilation (smoke hood or chimney).

Long-term solutions (time consuming and

expensive) are building an improved kitchen with ventilation, biogas cook stoves, electric cook stoves (generated by coal, gas, solar energy, wind and others) and the use of other clean energy technologies (LPG, solar, electricity).

Evaluation Session

What shall we do?

The discussion is: what can we do?

- Do you understand that biomass smoke is a danger for your health?
- How can we make a difference here?

How can we find a solution to avoid exposure to biomass smoke?

- Getting smoke out of the house.
- Smoke hoods, eaves and windows.
- Cutting smoke volumes.

- Energy-saving stoves, upesi stoves, rocket stoves, advanced biomass stoves, chimney stoves.
- Reducing need of fire.
- Retained-heat cookers (hay box), solar cookers, change of fuel.
- Changing pattern of behavior.
- Burning dry wood, using a pot lid, keeping children away, cooking outdoors.

Who will do it?

For more information, please contact your nearest health facility





