

# E-NEWS LETTER

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ANESTHESIOLOGY AND PERIOPERATIVE CARE



**AIIMS RAJKOT**

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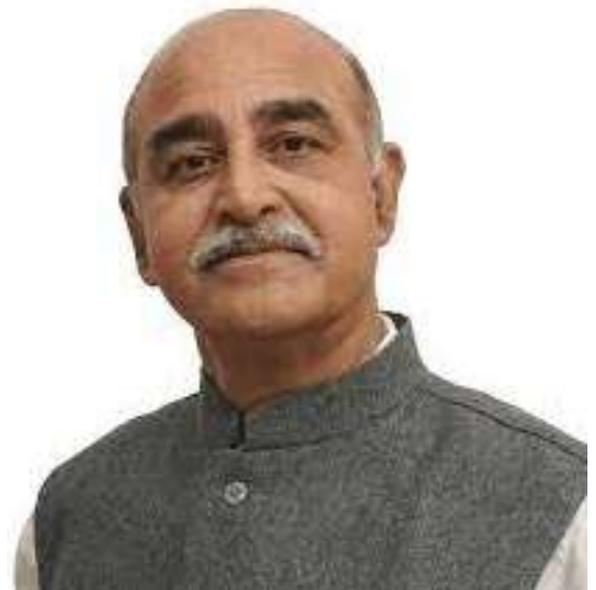
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## MESSAGE FROM ED SIR

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I congratulate the department of Anesthesiology and perioperative care for the E-newsletter.



*Dr. Colonel CDS Katoch Sir*

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*Department of Anesthesiology*

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## MESSAGE FROM THE DEPARTMENT

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On occasion of world environment day we are trying to highlight our role as healthcare professionals towards environment and climate changes. Each one can play an important role and contribute towards green environment.

**Lets go green**

**Dr Abhilasha Motghare**

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## Green Healthcare

“Greening” the healthcare industry will involve myriad other initiatives such as

the intelligent use of low-carbon technologies, low-carbon building design and construction, greater energy efficiency,

sustainable waste, water, transport and anaesthetics management and greater use of telemedicine.

It will require low-carbon supply chains based on circular-economy solutions minimizing raw material extraction and greenhouse gas emissions

It follows the following guidelines:

- Including looping mechanisms to prevent anesthetic gas and other radiation leaking from OTs.
- Methods for disposing of biomedical waste
- Strict anti-infection precautions are in place.
- Norms for proper ventilation
- Technology for scavenging
- Inside the OTs, there should be lot of airflow.
- Creating a standardized OT system
- Checking anesthesia machine
- Inspection of volatile agents
- Filling System Inspection
- Carbon dioxide, infrared rays, and radiation emission restrictions are being investigated.
- Controlling the temperature and humidity

How  
Going Green  
Helps  
Your Health





## GREEN OT CERTIFICATION

- This certificate is offered in collaboration with Abbott (multi-hospital stakeholder) by Bureau Veritas, a global leader in testing, inspection, and certification.
- It ensures that operating room safety requirements are consistent. Everything beneath the roof is covered, including airflow, OT setup, anesthetic equipment, evaluating the types of volatile agents utilized, filling systems, and so on.
- Cleaner practices combined with contemporary technology demonstrate a caring approach to the environment via heat care systems.

## PARAMETERS COVERED IN GREEN OT CONCEPT

1. Airflow inside OTs
2. Standardized OT set up
3. Anesthesia Machine
4. Types of volatile agents used
5. Filling systems adopted

Green connotes cleaner technique using modern technology and process with a sensitive approach to environment.

It will also ensure that emission of carbon dioxide; infra-red rays and radiations are within permissible limits.

## READING SUGGESTIONS

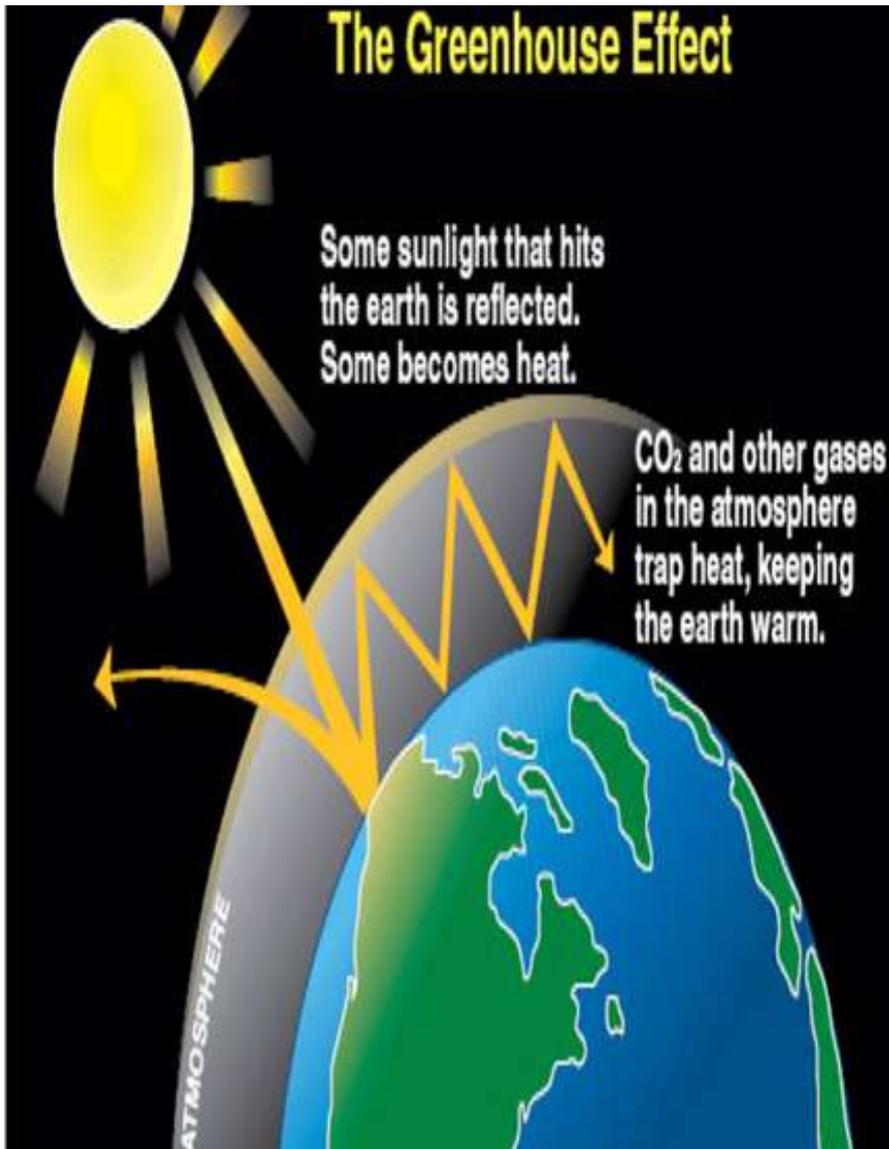
- Greening the O.R. Practice Greenhealth
- Health Care Without Harm
- Healthier Hospitals Initiative

## BENEFITS OF GREEN OT

- PREVENTION OF INFECTION IN OT
- SAFE ANESTHESIA PROTOCOLS
- SAFE SURGICAL TEAMS
- QUALITY ASSURANCE MECHANISMS



# GREEN HOUSE EFFECT



## Do you know ?

- Operating rooms generate 20–30 percent of total hospital waste.
- Inhaled anesthetics are potent greenhouse gases(GHG)
- Many anesthesia equipment and facility design choices can have significant environmental impact.

## Anesthetic agents

Inhaled anesthetics are greenhouse gases.

- Choose wisely – consider global warming potential (GWP) and atmospheric lifetime to decrease environmental impact of the gas
- Reduce anesthetic waste
- Capture and reuse anesthetic agents

## Medical Equipments

While using medical equipment consider :

- Life Cycle Assessment : Cradle to Grave Analysis
- Disposable Versus Reusable Equipment
- Reprocessed Equipment
- Government Oversight of Reprocessed Equipment
- Reformulation

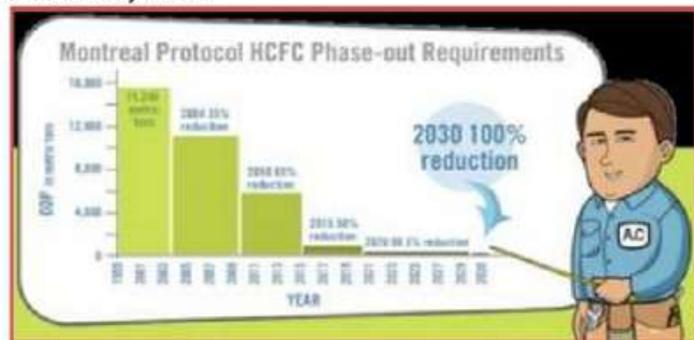
# THE MONTREAL PROTOCOL

## An initiative by UN gov

The Montreal Protocol on Substances that Deplete the Ozone Layer is a global agreement to protect the Earth's ozone layer by phasing out the chemicals that deplete it. This phase-out plan includes both the production and consumption of ozone-depleting substances. The landmark agreement was signed in 1987 and entered into force in 1989.

## The Montreal Protocol

- The Montreal Protocol on Substances that Deplete the Ozone Layer is an International Treaty designed to protect the ozone layer by Phasing out the production of numerous substances (ODS) believed to be responsible for Ozone depletion.
- The Treaty was opened for signature on September 16, 1987 and entered into force on January 1, 1989, followed by first meeting in Helsinki, May 1989. Since then, it has undergone seven revisions.
- Current status - ratified by all 197 UN members.
- The Montreal Protocol says that the production and consumption of compounds that deplete ozone in the stratosphere--chloroflourocarbons (CFCs), halons, carbon tetrachloride, and methyl chloroform-- are to be phased out by 2030.

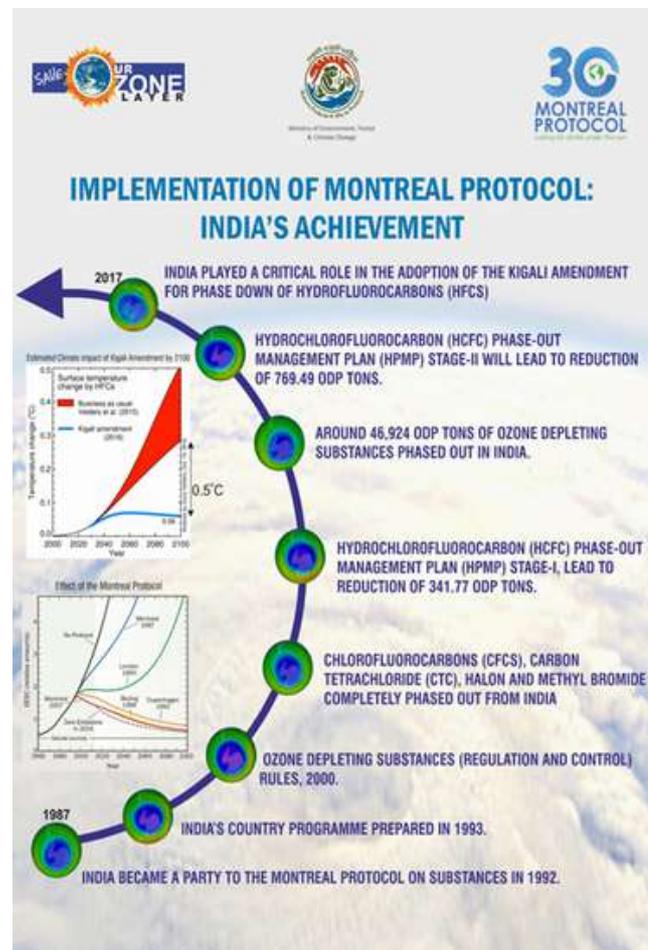


# ACHIEVEMENTS OF MONTREAL PROTOCOL



## India's Achievement

India became Party to the Vienna Convention and the Montreal Protocol on 18th March, 1991 and 19th June 1992 respectively.



The Montreal Protocol has been recognized as the most successful international environmental treaty in history

# What can we do ...



## Perioperative greening manual

It includes :

- Single-use device reprocessing
- Reusables versus disposables
- Energy efficient lighting and thermal comfort
- Green cleaning/proper disinfection in a surgical setting
- Battery recycling

## Raising Awareness

Provide some statistics regarding waste production per capita, the size of landfills, the nature-sparing effect and economic advantages of using recycled materials.

## Assembling a Green Team

Identify leaders to become the "go-to" person for development of sustainability projects

## Reminders

Remind the importance and benefits of eco-friendly behavior

Give frequent reminders and encouragement

## Identify Green Champions

- Identify opportunities
- Educate staff
- Monitor progress
- Report statistics
- Re-educate personnel

# **WE ARE CARRYING THE RESPONSIBILITY OF SAVING THE PLANET**



One small effort by each individual will make a big difference.

**Be watchful about ecological footprints.**

**#Only One Earth#**