



# GREENER MEDICINE?

## Climate impact of drugs in the healthcare sector

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### Background

Climate change severely affects health worldwide. Paradoxically, the healthcare sector in it self is a major contributor to greenhouse gas (GHG) emissions.

**If the entire healthcare sector were a country it would be the 5th largest GHG emitter in the world!**

### Aim

An overview of published literature concerning climate impact of drugs in the hospital sector



### Methods

- A scoping review
- Databases: PubMed and Embase
- Full text peer reviewed original articles
- Articles published within 2004-2024
- Conducted in line with PRISMA-ScR checklist

### Results

**Volatile gasses or anaesthetic drugs**  
n = 16 articles

**Inhaler based emissions**  
n = 6 articles

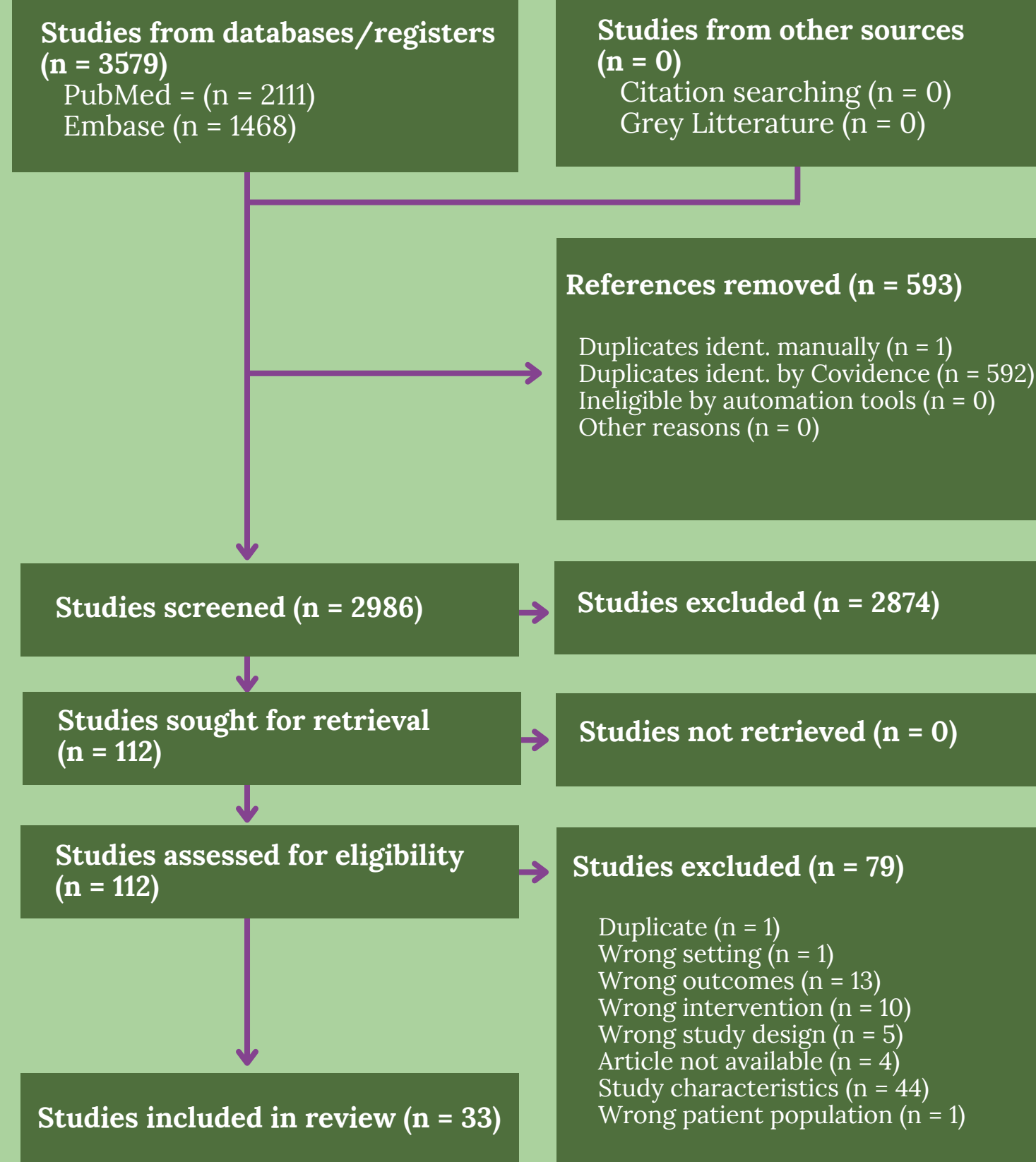
**Ophthalmology**  
n = 4 articles

**Surgical procedures (medical products)**  
n = 2 articles

**Total healthcare system or whole-hospital**  
n = 5 articles

**Not otherwise specified**  
n = 2 articles

**33 articles included**



### Conclusion

Existing literature is primarily focused around anaesthetic gasses and inhaler medicine

All areas show potential for reduction of GHG emissions

Research on the climate impact of drugs is still limited

Further research is needed to help reduce emissions from drug use

### Contact



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**Pubmed:** (((("Health Care Facilities, Manpower, and Services"[Mesh]) OR health\*[tiab] AND ("Pharmaceutical Preparations"[Mesh]) OR (Anaesthetic gas\*[tiab]) OR "Pharmaceutical Preparation"[tiab] AND ("Carbon Footprint"[Mesh]) OR ("Greenhouse Gases"[Mesh]) ) OR (Eco-pharmaco-stewardship\*[tiab]) NOT agriculture\*[tiab] NOT food\*[tiab] NOT vehicles\*[tiab] NOT water\*[tiab] AND (2004:2024[mdat]) AND (danish[Filter] OR english[Filter] OR norwegian[Filter] OR swedish[Filter])

**Embase:** \*health care facility/ OR health\*.mp. AND \*pharmaceutics/ OR Anaesthetic gas\*.mp OR "Pharmaceutical Preparations".mp. AND \*carbon footprint/ OR \*greenhouse gas/ OR Eco-pharmaco-stewardship.mp. NOT agriculture\*.mp. NOT food\*.mp. NOT vehicles\*.mp. NOT water\*.mp.