



# The effect of cleaning products on occupant's health

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# STATEMENT SLIDE



I have no conflicts of interest to disclose

# INTRODUCTION

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- ❖ The use of household cleaning products exposes occupants to various potentially hazardous chemicals that can impact human health.
- ❖ These products often include surfactants, acids/bases, carcinogens like chloroform, and endocrine-disrupting chemicals.
- ❖ With a growing body of evidence on the impacts of cleaning products on human health, there is a need to synthesize the researched information on this important topic.

## AIMS

- ❖ To summarize the effects of commonly used cleaning products on human health in occupational and non-occupational environments.

# METHODS

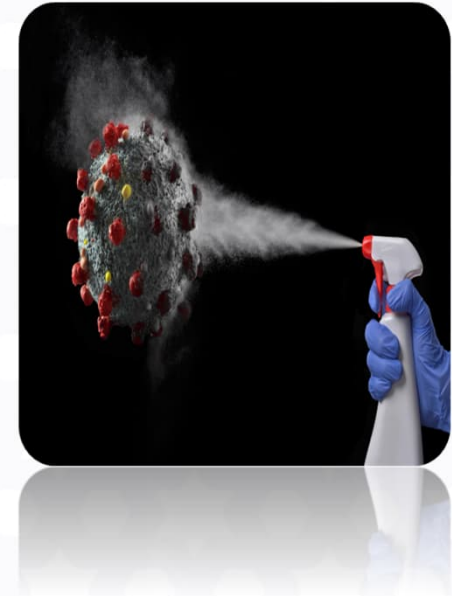


- ❖ Searches were performed in Google Scholar and PubMed using 18 search terms and their combinations.
- ❖ The search was restricted to scientific articles published between 2013 and 2023.

Search terms used				
Children	Cleaners	Cleaning agents	Cleaning chemicals	Cleaning methods
Cleaning products	Exposure	Healthcare workers	Health effects	Home environment
Household disinfectants	Household use	Indoor environment	Occupational asthma	Occupants' exposure
Occupant's health	School environment	Surface cleaning		

# RESULTS AND DISCUSSION

- ❖ The chemicals present in cleaning agents, as well as the reactions caused by agents interacting with surfaces, can have detrimental effects on human health.
- ❖ Individuals with close or frequent contact with cleaning products are particularly susceptible to these effects.



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- ❖ Occupational exposure to cleaning and disinfectant products has been linked to an increased risk of asthma and rhinitis.
  - ❖ Exposure to cleaning products during pregnancy or in the first years of life has been associated with persistent wheezing in early childhood.



# CONCLUSION

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- ❖ Epidemiological studies provide evidence of the adverse effect of exposure to cleaning products and disinfectants on respiratory health. These effects are observed not only in adults with close or frequent contact to cleaning products in occupational settings but also in relation to common exposures at home, especially during early life.
- ❖ To mitigate the adverse health effects, it is recommended to
  - ❖ reduce exposure to harmful chemicals by developing safer cleaning methods both in occupational and home settings.
  - ❖ improve ventilation during and after cleaning.
  - ❖ increase people's awareness of the harmfulness of cleaning chemicals and of safe cleaning practices,
  - ❖ label cleaning and disinfecting products clearly.

# ACKNOWLEDGEMENTS

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This work was supported by the European Union (grant no. 101056883), the Academy of Finland (grants nos.330150 and 330151), and the Australia Research Council (ARC) Industrial Transformation Training Centres (ITTC) 'ARC Training Centre for Advanced Building Systems Against Airborne Infection Transmission' (grant no. IC220100012).



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