

Exercises

Master's degree in environmental science and engineering

Occupational and environmental health

1. Introduction

- Our exposure to pollutants can come from a variety of living spaces, in which case we speak of aggregate exposure. For the following pollutants, can you identify the relevant living space(s), as well as a typical example of an exposure situation?

Pollutant	General environment	Indoor environment	Occupational environment
Ozone (Example)	Airborne UV-induced O ₃ generation in polluted areas	n.a.	O ₃ -based water disinfection processes, arc welding
Formaldehyde			
TiO ₂ nanoparticles			
Lead			

- 30% of European workers declare that work affects their health. In Switzerland, only 2700 occupational diseases are recognized annually (against >270'000 accidents).
 - Name factors that explain this underreporting.
 - Can you imagine situations leading to under-reporting of occupational injuries?
- A risk assessment carried out in an industrial bakery has enabled us to place 3 dangerous phenomena in the following matrix (SUVA risk matrix). Propose examples of preventive measures that seem adequate for these situations (justify the type of measure proposed).



