

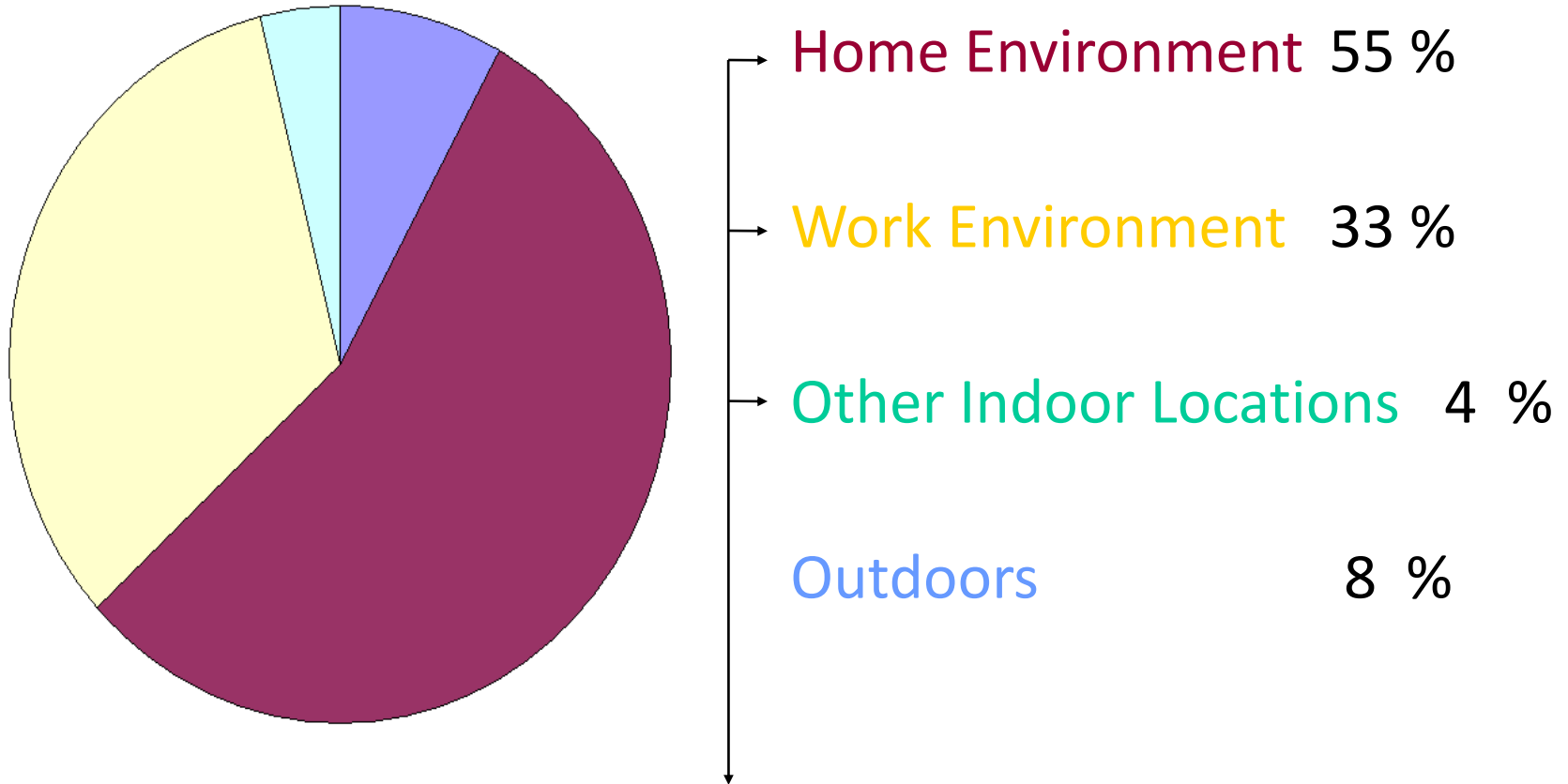
Effects of indoor environment on health

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We spend approximately 90% of time Indoors



Outdoor air

Indoor air



Modified by:
Humidity, ventilation
Building techniques

Particles
VOCs
SVOCs
gasses

Biological sources
Moulds, house dust
mites, pets, a.o.

Chemical sources:
PVC, paints, textiles, wall
paper, cleaning agents,
smoke from burning for
heating, cooking and
tobacco use, electronics,

Diseases
Well being and
productivity
Asthma and allergies.
Cardiovascular diseases
Cancer
Infections

Caused by:
Inflammation
Oxidative stress
Sensitisation
Carcinogenesis
Damaged genes

Exposures give rise to acute and chronic diseases and symptoms

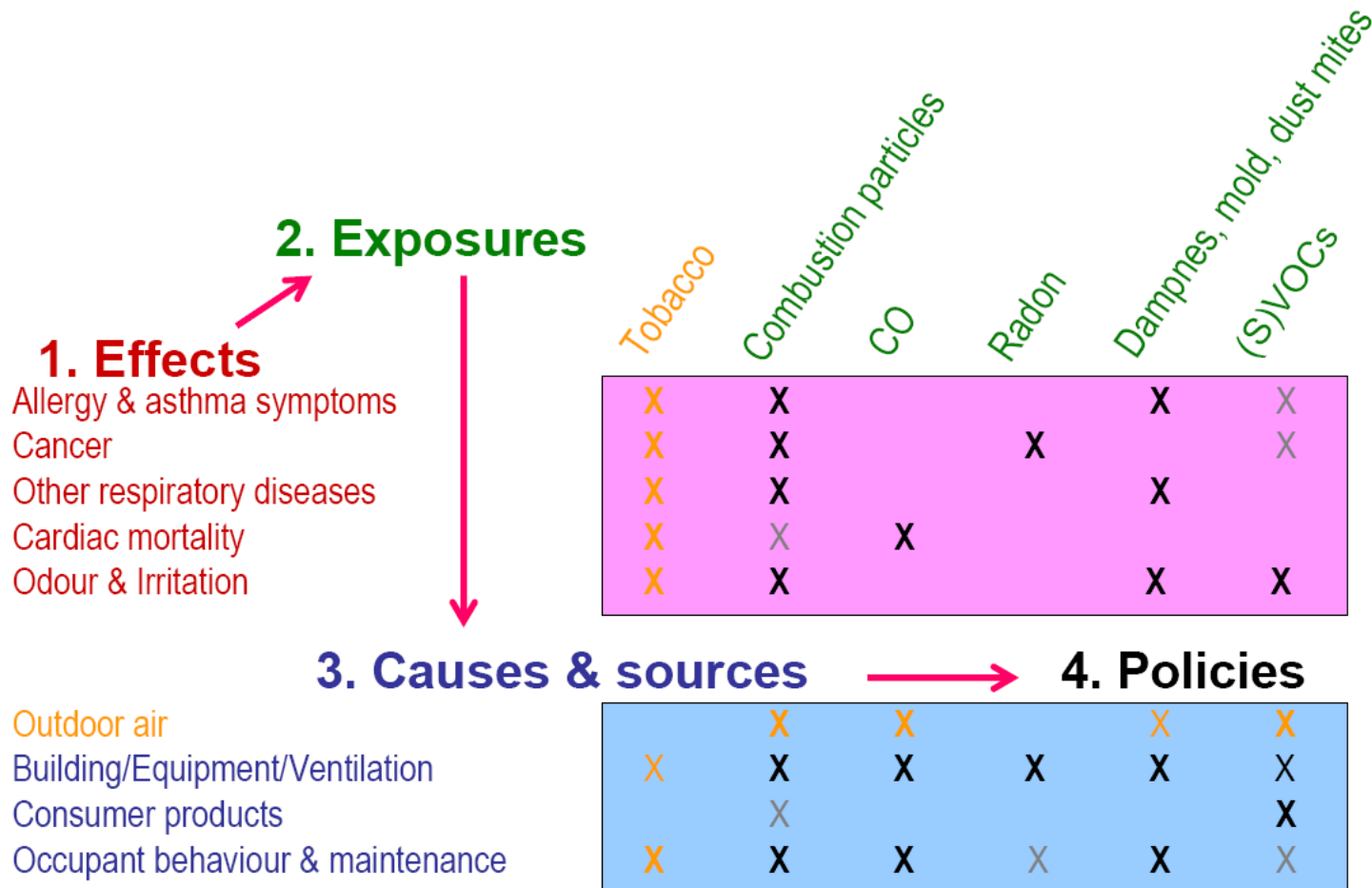
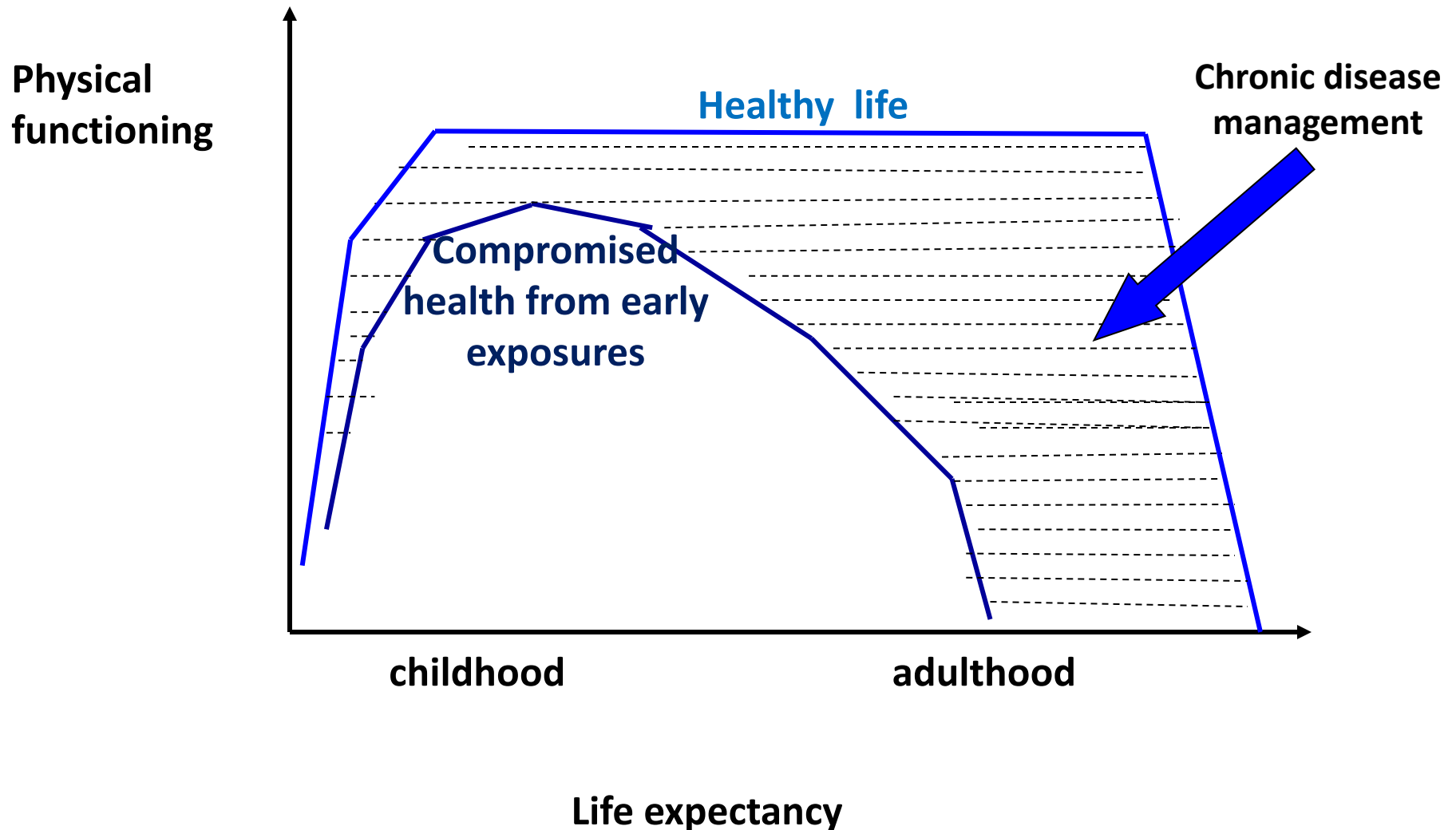


Figure 1. Flowchart of the EnVIE project highlighting the health, exposure, and source issues selected in the first stage of the project.

Chronic diseases characterised by:

persistance, more years of disability and handicap, shorter life expectancy and can totally or partly be abrogated by a continuous action of health care



Gaps in knowledge

6

- Which adverse health effects outside the respiratory tract can be attributed to indoor microbes
- Contribution of indoor air pollutants to child respiratory diseases and adult functions and diseases.
- Effects and risks of nanoparticles in indoor air.
- Interaction between various indoor pollutants
- The importance and mechanisms of interactions for carcinogens like benzene, formaldehyde, PAHs, PM-10 etc