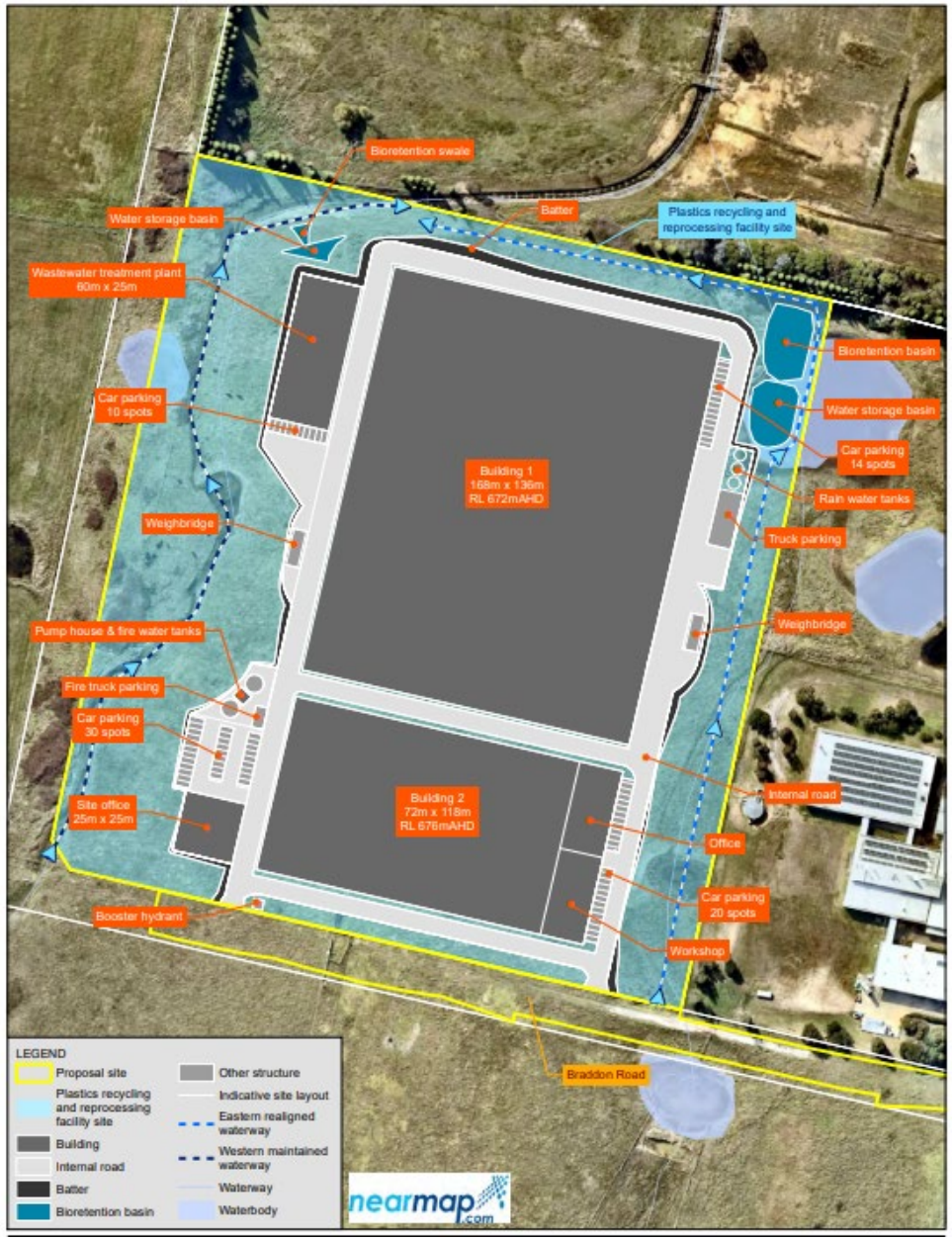
Doctors for the Environment Australia



Plasrefine Recycling Pty Ltd
Proposed site layout

Taken from Moss Vale Plastics Recycling and Reprocessing Facility
Technical Report 4 – Preliminary Site Investigation (Contamination)
Figure 1.2

THE UNIVERSITY OF MELBOURNE

Melbourne Climate Futures

Health impacts associated with traffic emissions in Australia.

Expert Position Statement

Endorsed by:

Australian Chronic Disease Prevention Alliance

Heart Foundation

Cancer Council Australia

Kidney Health Australia

diabetes australia

Stroke Foundation

Lung Foundation Australia

Doctors for the Environment Australia

ASTHMA AUSTRALIA

caha Climate and Health Alliance

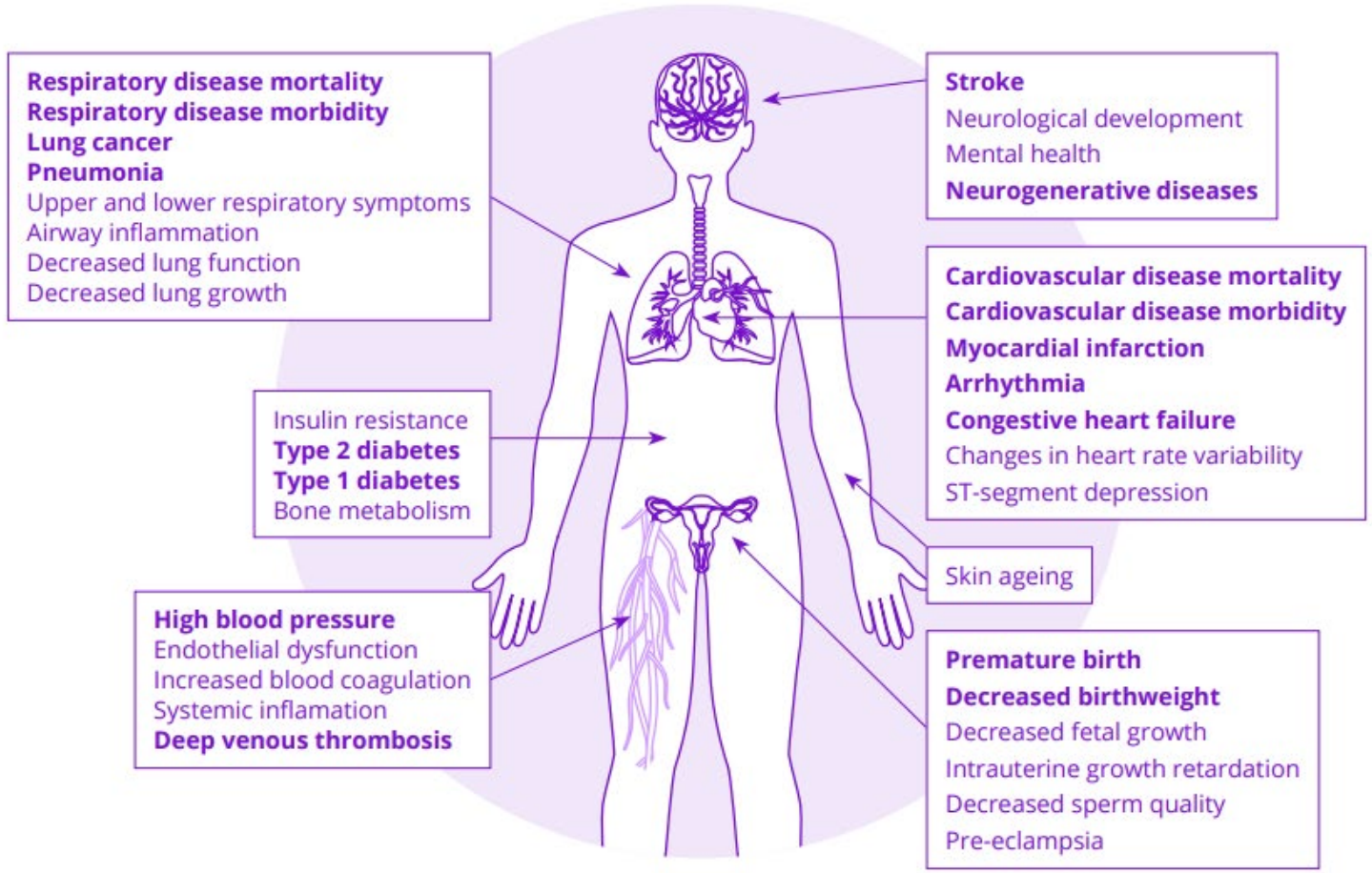


Figure 1. Overview of diseases, conditions and biomarkers affected by outdoor air pollution. Bold type indicates conditions currently included in the Global Burden of Disease categories (Thurston, Kipen et al. 2017)

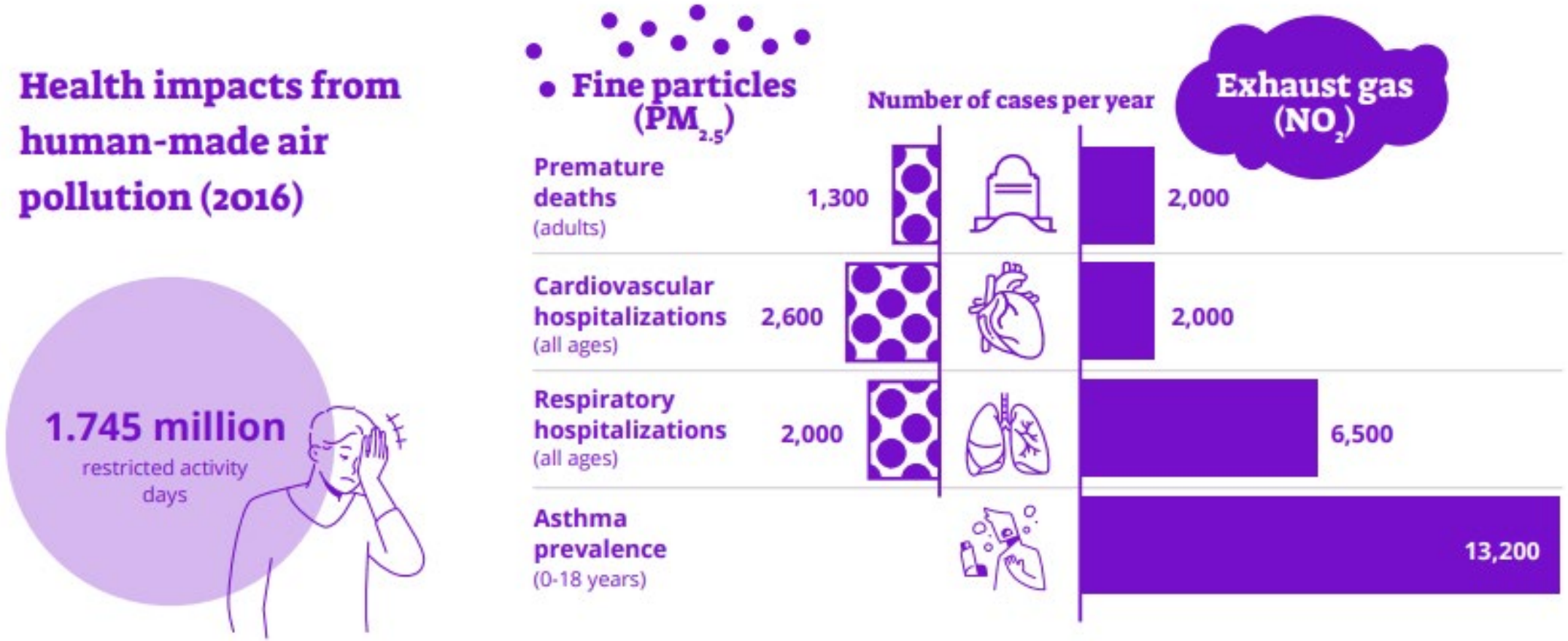


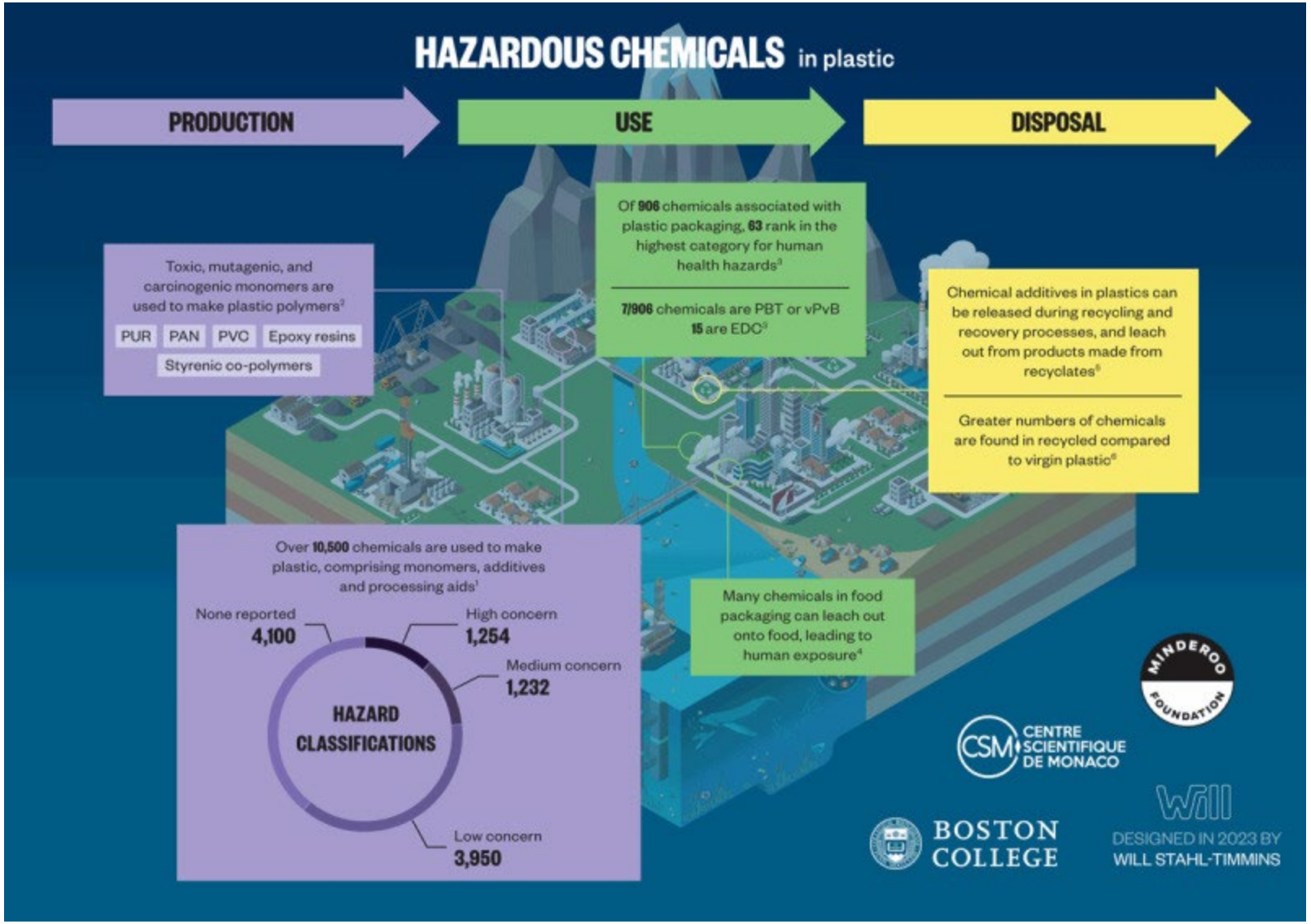
Figure 2. Key findings of the HAPINZ 3.0 Study

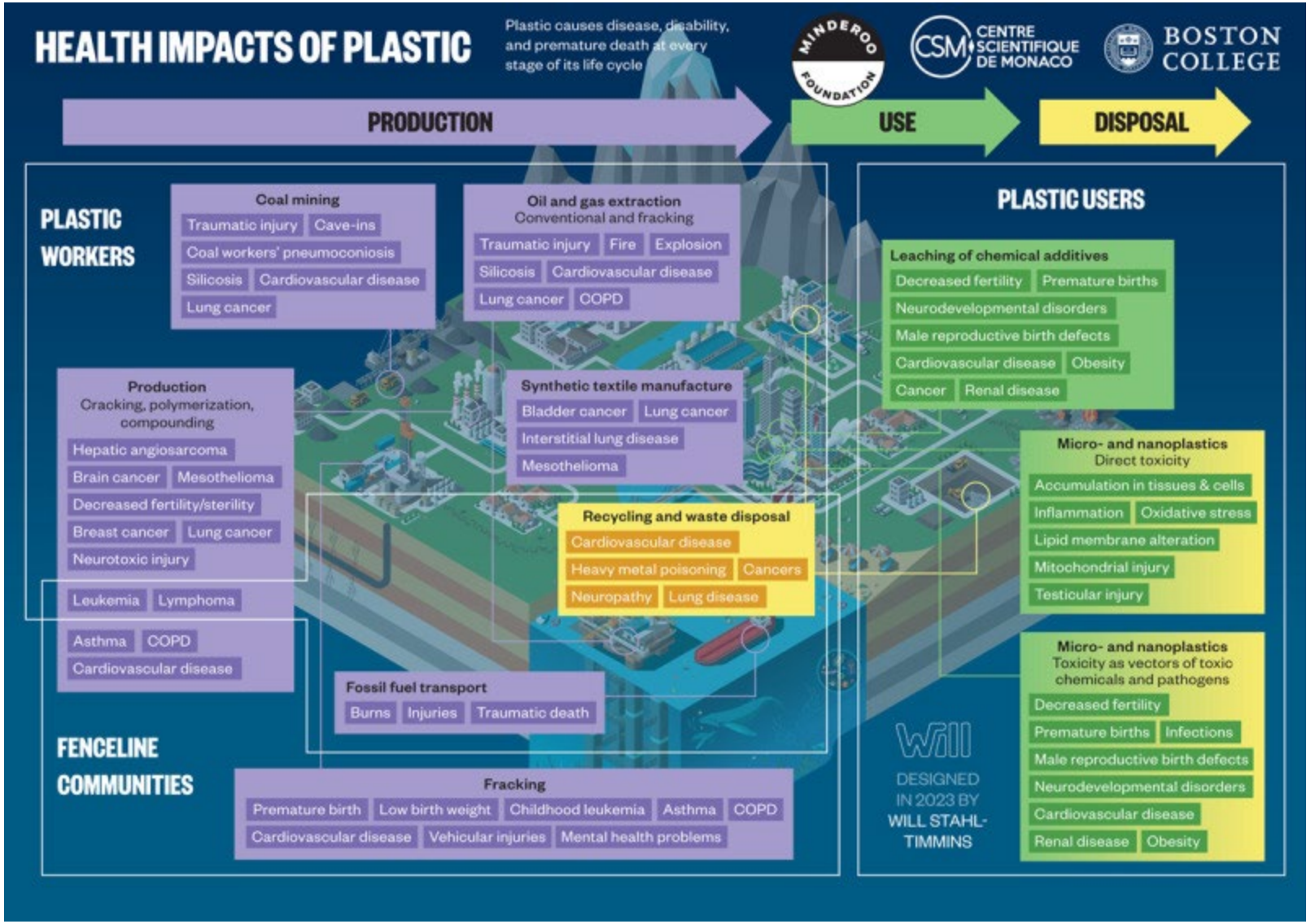
The Precautionary Principle in Environmental Decision Making

Four central components

- Taking preventive action in the face of uncertainty
- Shifting the burden of proof to the proponents of an activity
- Exploring a wide range of alternatives to possibly harmful actions
- Increasing public participation in decision making

Kriebel D, Tickner J, Epstein P, Lemons J, Levins R, Loechler EL, Quinn M, Rudel R, Schettler T, Stoto M. The precautionary principle in environmental science. Environ Health Perspect. 2001 Sep;109(9):871-6. doi: 10.1289/ehp.01109871. PMID: 11673114; PMCID: PMC1240435.


HAZARDOUS CHEMICALS in plastic
PRODUCTION
USE
DISPOSAL
Toxic, mutagenic, and carcinogenic monomers are used to make plastic polymers[2]
PUR
PAN
PVC
Epoxy resins
Styrenic co-polymers
Of 906 chemicals associated with plastic packaging, 63 rank in the highest category for human health hazards[3]
7/906 chemicals are PBT or vPvB
15 are EDC[3]
Chemical additives in plastics can be released during recycling and recovery processes, and leach out from products made from recyclates[5]
Greater numbers of chemicals are found in recycled compared to virgin plastic[6]
Over 10,500 chemicals are used to make plastic, comprising monomers, additives and processing aids[1]
None reported
4,100
High concern
1,254
Medium concern
1,232
HAZARD CLASSIFICATIONS
Low concern
3,950
Many chemicals in food packaging can leach out onto food, leading to human exposure[4]
MINDEROO FOUNDATION
CSM CENTRE SCIENTIFIQUE DE MONACO
BOSTON COLLEGE
DESIGNED IN 2023 BY
WILL STAHL-TIMMINS


HEALTH IMPACTS OF PLASTIC
Plastic causes disease, disability, and premature death at every stage of its life cycle
MINDEROO FOUNDATION
CSM CENTRE SCIENTIFIQUE DE MONACO
BOSTON COLLEGE
PRODUCTION
USE
DISPOSAL
PLASTIC WORKERS
Coal mining
Traumatic injury
Cave-ins
Coal workers' pneumoconiosis
Silicosis
Cardiovascular disease
Lung cancer
Oil and gas extraction
Conventional and fracking
Traumatic injury
Fire
Explosion
Silicosis
Cardiovascular disease
Lung cancer
COPD
PLASTIC USERS
Leaching of chemical additives
Decreased fertility
Premature births
Neurodevelopmental disorders
Male reproductive birth defects
Cardiovascular disease
Obesity
Cancer
Renal disease
Production
Cracking, polymerization, compounding
Hepatic angiosarcoma
Brain cancer
Mesothelioma
Decreased fertility/sterility
Breast cancer
Lung cancer
Neurotoxic injury
Leukemia
Lymphoma
Asthma
COPD
Cardiovascular disease
Synthetic textile manufacture
Bladder cancer
Lung cancer
Interstitial lung disease
Mesothelioma
Recycling and waste disposal
Cardiovascular disease
Heavy metal poisoning
Cancers
Neuropathy
Lung disease
Micro- and nanoplastics
Direct toxicity
Accumulation in tissues & cells
Inflammation
Oxidative stress
Lipid membrane alteration
Mitochondrial injury
Testicular injury
Fossil fuel transport
Burns
Injuries
Traumatic death
Micro- and nanoplastics
Toxicity as vectors of toxic chemicals and pathogens
Decreased fertility
Premature births
Infections
Male reproductive birth defects
Neurodevelopmental disorders
Cardiovascular disease
Renal disease
Obesity
FENCELINE COMMUNITIES
Fracking
Premature birth
Low birth weight
Childhood leukemia
Asthma
COPD
Cardiovascular disease
Vehicular injuries
Mental health problems
WII
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Doctors for the Environment Australia
Climate Care is Health Care