Cancer Prevention in the Community

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"Cancer Prevention"

Is there more to "Cancer Prevention?"

LEVELS OF PREVENTION

Whole population through public health policy	Whole population selected groups and healthy individuals	Selected individuals with high risk patients	Patients
PRIMORDIAL PREVENTION establish or maintain conditions to minimise hazards to health	**PRIMARY PREVENTION** prevent disease well before it develops Reduce risk factors	**SECONDARY PREVENTION** early detection of disease (e.g. Screening & Intervention for Pre diabetes)	**TERTIARY PREVENTION** treat established disease to prevent deterioration
Advocacy for social change to make physical activity easier	Primary care advice as part of routine consultation	e.g. primary care risk factor reduction for those at risk of chronic disease, falls, injury	e.g. exercise advice as part of cardiac rehabilitation

Among the factors with the biggest impact on cancer incidence in the United States are the following:

~33% of cancer diagnoses are caused by **tobacco use**.

~20% of cancer diagnoses are related to individuals being **obese or overweight**.

~16% of cancer diagnoses are related to infection with one of several **cancer-causing pathogens**.

~5% of cancer diagnoses are related to individuals getting **insufficient physical activity**.
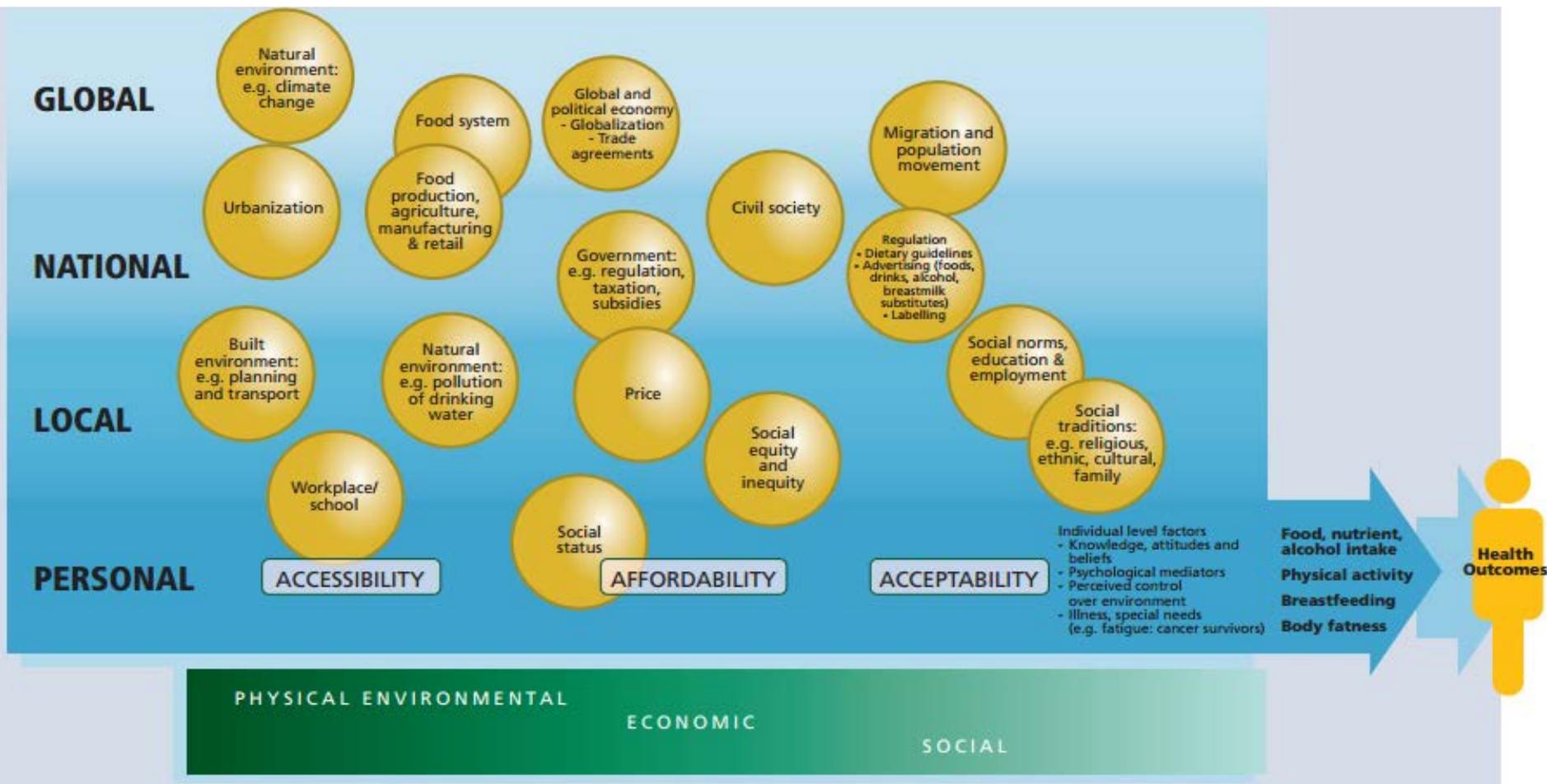
~5% of cancer diagnoses are related to individuals having **poor dietary habits**.

~2% of cancer diagnoses are a result of **exposure to ultraviolet light from the sun or tanning devices**.

Factors that affect risk of cancer

Cancer in the Community

- Lifestyle

- Environment

- Social

- Economic

Epidemic of Cancer

- Cancer is one of the world's leading cause of death
- Currently estimated at 8.2 million deaths annually
- Expected to rise by 75% to nearly 25 million by 2035
- Cancer prevention will be key

Lifestyle and Cancer

- 1/3 of most common cancers are preventable through a nutritious diet, maintaining a healthy weight, and regular physical activity

- 1/3 of the world's population is obese or overweight

Sources: World Cancer Research Fund International; Lancet

Lifestyle and Cancer

- Research shows strong link between overweight/obesity and at least nine cancers:
    - Ovarian
    - Prostate
    - Bowel
    - Kidney
    - Gallbladder
    - Womb
    - Esophageal
    - Pancreatic
    - Breast (post-menopause)

Lifestyle Factors and Cancer

- Level and frequency of physical activity
- Dietary choices: sugary drinks, calorie intake, plant vs. animal foods, processed foods
- Alcohol consumption
- Breastfeeding

Estimates (PAF%)[1] of cancer preventability by appropriate food, nutrition, physical activity and body fatness[2] in the USA

	By appropriate food, nutrition, and physical activity and body fatness[2]	By appropriate body fatness only [2,3]	
		Male	Female
Stomach	47	-	-
Pancreas	39	34	25
Gallbladder	21	11	28
Liver	15	-	-
Colorectum	45	16	3
Breast	38	-	17
Endometrium	70	-	49
Prostate	11	-	-
Kidney	24	20	28

Sources: World Cancer Research Fund International

Cancer in the Community

- Lifestyle
- **Environment**
- **Social**
- **Economic**

Environment and Cancer

- Built environment: walkability, parks, recreational facilities

- Planning and Transport: facilities for breastfeeding, transportation systems and networks

- Food production: animal production, availability of fresh produce

- Retail and restaurant food service: access, marketing

- Climate and terrain: climate change, safe water

Economic Factors and Cancer

- Food and drink processing: food labeling, reduced portion sizes

- Availability and price: farm subsidies, taxes on certain foods and alcohol, incentives for healthy food and exercise

- Economic globalization: global food trade on production systems

Social Factors and Cancer

- Ethnicity and culture: traditional diets, breastfeeding

- School and work: education, limiting the unhealthy and promoting the healthy

- Social status and equity

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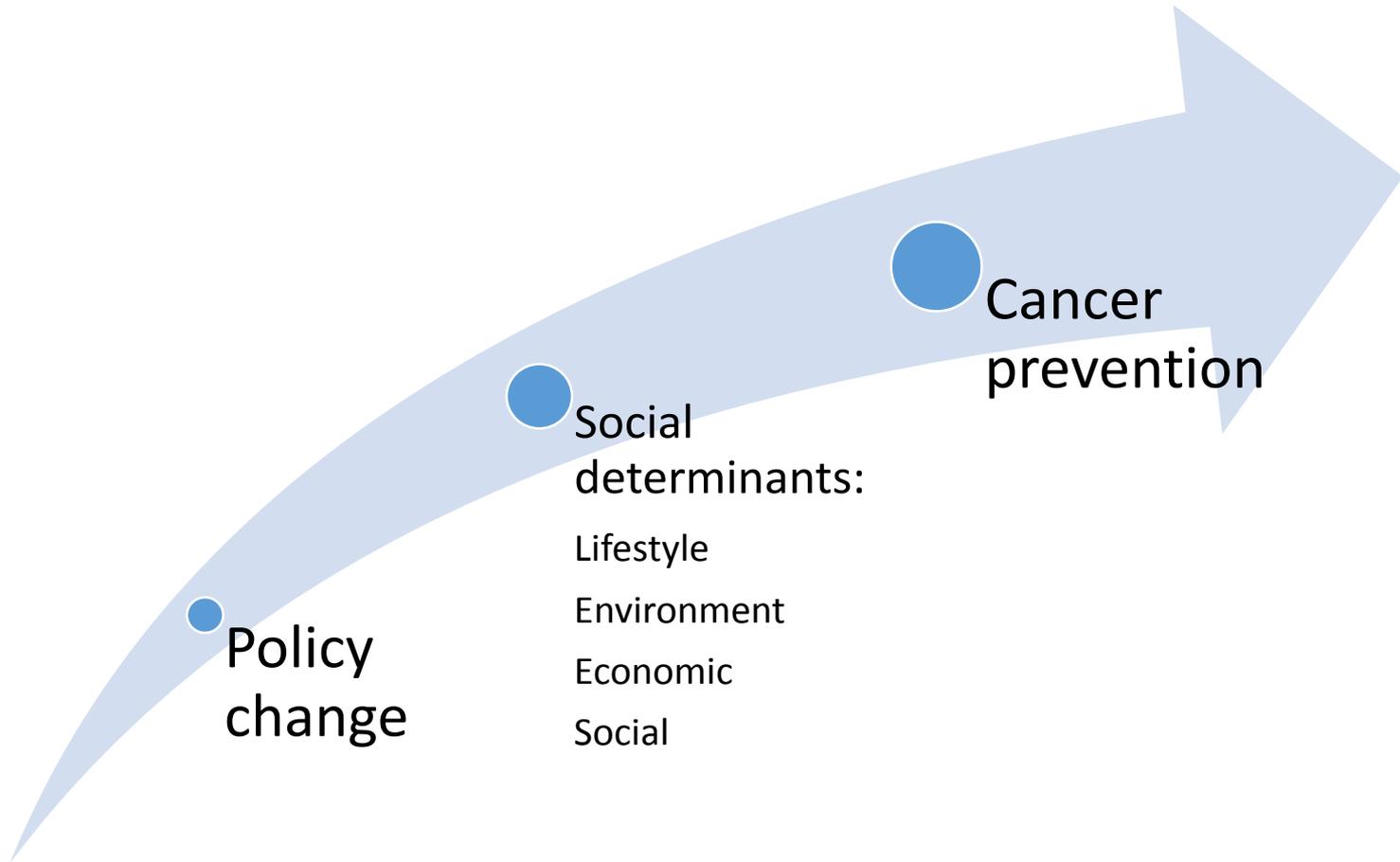
- Lifestyle
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Social Determinants of Health

Cancer in the Community

Social determinants require a comprehensive approach

- Environmental policy
- Food policy
- Planning and zoning, housing and community design
- Medical community
- Education
- Transportation
- Public safety
- Job opportunities and economic development
- Poverty
- Culture, language/literacy

Cancer in the Community

Policy change

Social determinants:

Lifestyle

Environment

Economic

Social

Cancer prevention

Policy Change and Cancer

- Legislation
- Regulations
- Programs
- Grants/Funding
- Research
- Communications/outreach
- Education

Questions?

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