The Health Environment

Healthcare policy, Management and Economics, Public Health, Lecture 6

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The determinants of health

- the social and economic environment,
- the physical environment, and
- the person's individual characteristics and behaviors.

The Physical Enviroment

▸ Air pollution
▸ Contaminated water
▸ Contaminated Food
▸ Nuclear waste
▸ Noise

Air pollution

▸ Air pollution affects all regions of the world. However, populations in low-income cities are the most impacted
▸ According to the latest air quality database, 97% of cities in low- and middle- income countries with more than 100,000 inhabitants do not meet WHO air quality guidelines
▸ In high-income countries, that percentage decreases to 49%.

Air pollution

- As air quality declines, the risk of stroke, heart disease, lung cancer, and chronic and acute respiratory diseases, including asthma, increases for the people who live in them
- The most common **measurements** of air pollution are PM 2.5 and PM 10, **measured** in micrograms per cubic meter. PM_{10} is particulate matter 10 micrometers or less in diameter

Air pollution–most polluted cities

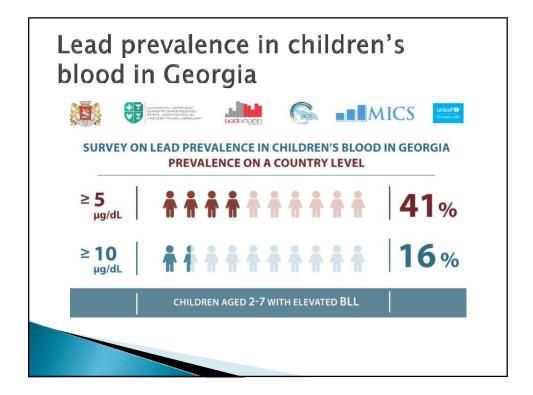| Position ⬍	Country ⬍	City/Town ⬍	Year ⬍	PM2.5 ⬍	Temporal coverage ⬍	PM10 ⬍	Temporal coverage ⬍	Database version (year) ⬍
1	India	Kanpur	2016	173	>75%	319	NA	2018
2	India	Faridabad	2016	172	>75%	316	NA	2018
3	India	Gaya	2016	149	50% -< 75%	275	NA	2018
4	India	Varanasi	2016	146	>75%	260	NA	2018
5	India	Patna	2016	144	>75%	266	NA	2018
6	India	Delhi	2016	143	>75%	292	NA	2018
7	India	Lucknow	2016	138	>75%	255	NA	2018
8	Cameroon	Bamenda	2012	132	NA	141	NA	2016
9	India	Agra	2016	131	>75%	194	NA	2018
10	India	Gurgaon	2016	120	50% -< 75%	124	NA	2018
11	India	Muzaffarpur	2016	120	>75%	221	NA	2018
12	Pakistan	Peshawar	2010	111	NA	540	NA	2016
13	Pakistan	Rawalpindi	2010	107	NA	448	NA	2016
14	India	Jaipur	2016	105	50% -< 75%	193	NA	2018
15	Uganda	Kampala	2013	104	NA	170	NA	2016

Asbestos abatement pollution

- Depending on how and where asbestos was applied, it might not pose any risk to most users of the building
- If the fibers cannot become dislodged, they cannot be inhaled, and thus the asbestos poses no risk

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Lead prevalence in children's blood in Georgia

The Social Enviroment

- Income and social status – higher income and social status are linked to better health. The greater the gap between the richest and poorest people, the greater the differences in health.
- Education – low education levels are linked with poor health, more stress and lower self-confidence.

The Social Environment

- Social support networks – greater support from families, friends and communities is linked to better health. Culture – customs and traditions, and the beliefs of the family and community all affect health.
- Health services – access and use of services that prevent and treat disease influences health.

Thank you

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