

A systemic approach of the links between geographical contexts and asthma

Populations' health differs from one place to another. Those differences may result from a variety of determinants' combinations.

Some determinants are expressed at the individual level, others at a contextual level. This poster aims at exploring the concept of context from a geographical point of view.

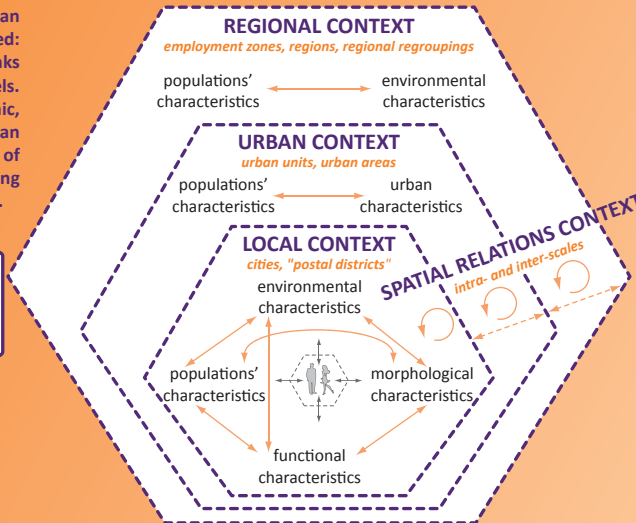
Three levels of context are considered: local, urban and regional. A fourth one is also explored: the "spatial relations" context, which interlinks spatial units of same level or different levels. Contexts are characterized using socioeconomic, environmental, morphological, functional and urban dimensions. Each context creates a combination of dimensions for the populations' health. Intertwining of contexts is described, using a systemic approach.

populations' characteristics

- demographic
 - socioeconomic
 - sanitary
 - cultural behaviours
- LOCAL CONTEXT
URBAN AND REGIONAL CONTEXTS

functional characteristics

- presence of general practitioners
- presence of pneumologists
- presence of health facilities
- accessibility to healthcare
- populations' activities



environmental characteristics

- allergens
 - air pollution
 - meteorology
 - climate
- LOCAL CONTEXT
REGIONAL CONTEXT

urban characteristics

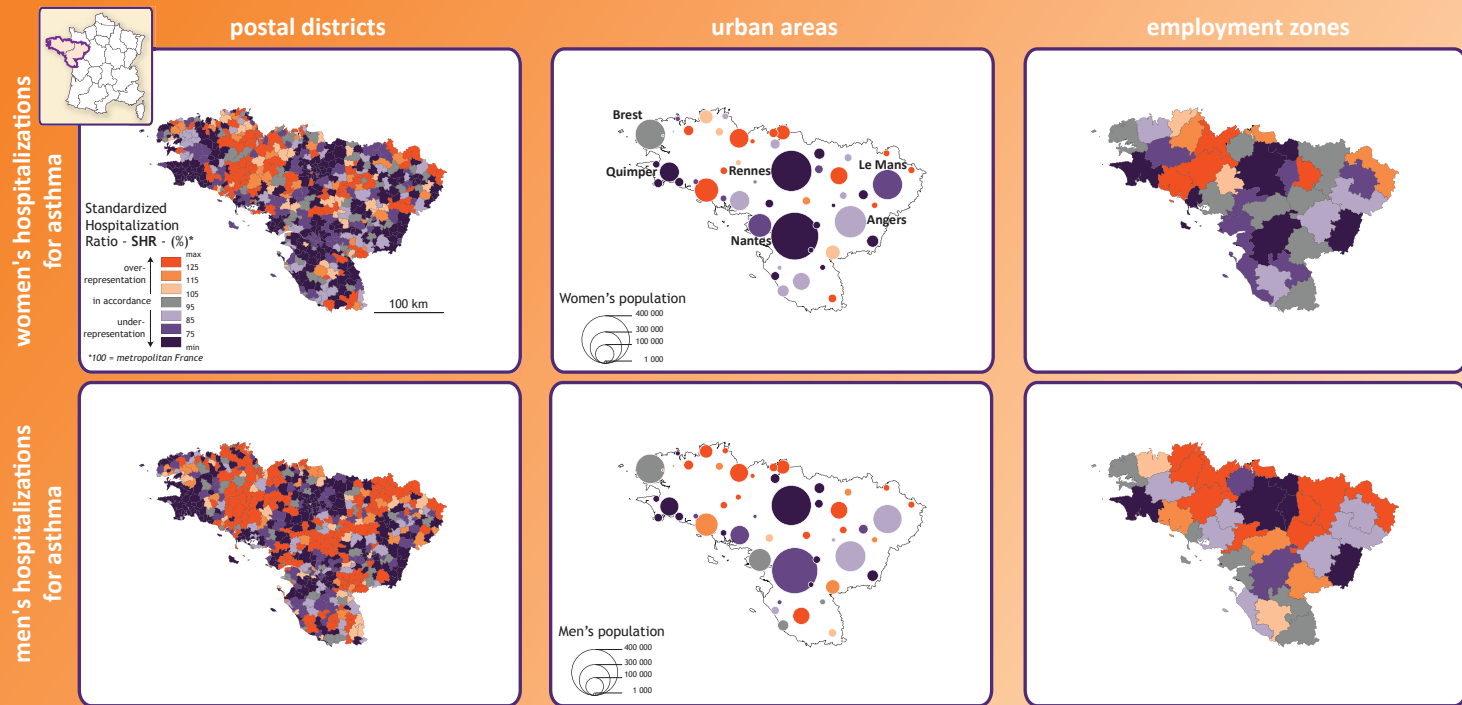
- location
- size
- economic specialisation

morphological characteristics

- greenspace
- built
- road network

A multiscale and multidimensional approach of asthma in western France

Women's and men's hospitalizations for asthma in western France are examined at the scales of postal districts, urban areas and employment zones. Spatial trends appear at all scales.



main descriptive parameters

	postal districts		urban areas		employment zones	
	women's SHR for asthma	men's SHR for asthma	women's SHR for asthma	men's SHR for asthma	women's SHR for asthma	men's SHR for asthma
n	610	610	51	51	34	34
min	0	0	37	51	56	56
median	83	90	89	100	95	103
max	365	404	203	178	160	164
mean	91	101	94	104	96	105
std	45	51	32	35	23	26

Those spatial trends may be enlightened by several socioeconomic characteristics. Some systematically deprived places and categories of population are identified (as exemplified by following correlations).

significant correlations (alpha = 0,05)

		socioprofessional groups (%)							
		executives and higher intellectual professions	artisans, shopkeepers, company heads	intermediary professions	employees	farmers operators	workers	pensioners	other people without professional activity
postal districts	women's SHR for asthma								
urban areas	women's SHR for asthma								
employment zones	women's SHR for asthma								

		level of highest diploma (%)						
		no diploma	former school leaving certificate	French General Certificate Secondary Education	vocational diploma	high school diploma	under-graduate studies	graduate studies
postal districts	women's SHR for asthma							
urban areas	women's SHR for asthma							
employment zones	women's SHR for asthma							

- orange square: positive
- dark blue square: negative
- white square: nonsignificant