

Housing-Health WHO initiative



Methodological aspects

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Background

**Housing conditions affect the health status
BUT...**

- **Are not acknowledged as a major health determinant**
- **No sufficient data except few domains such as IAQ, VOC, asbestos, lead, radon, or space**
- **No comprehensive assessment of sectoral housing impacts (cocktail effect)**
- **Mental health dimension insufficiently covered**



WHO-Definition of «Housing»



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- **Description of housing parameters influencing health outcomes, including the variations between countries,**
- **Provision of a situation report of housing conditions and health status in participating cities & countries,**
- **Identification of priorities for action and policy development at local & national level, based on above-mentioned reports**



Survey design

Exploratory study

Various parameters
No specific hypothesis
broad analysis options

Cross-sectional study

Financial & logistic limitations
Focus on identification
of associations

Household survey

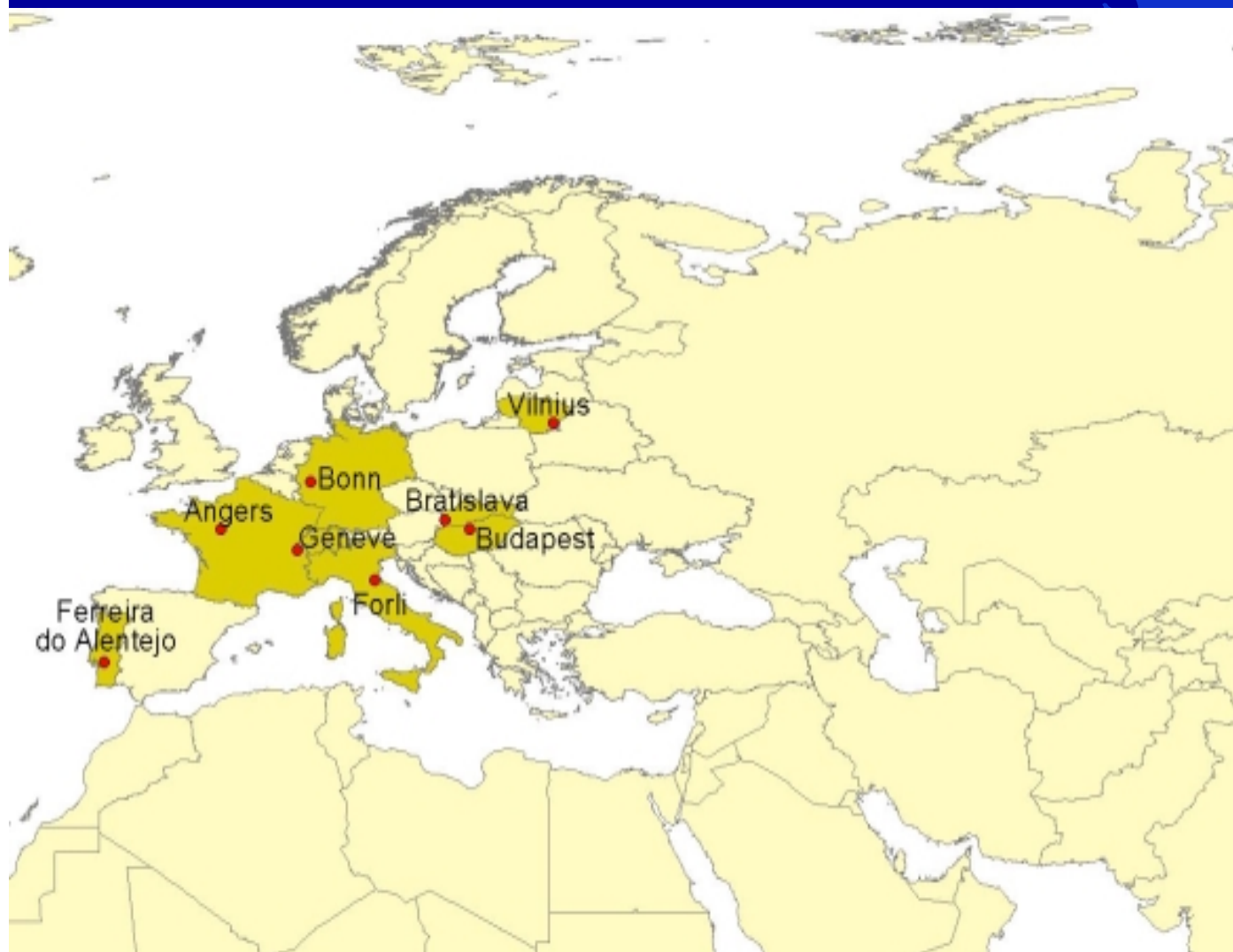
Focus on subjective and
perceptive data
Residents as „experts“

No measurements

Financial constraints
Logistical issues
Time period needed



Countries and cities actively involved in the WHO Housing & Health program



- **Italy: Forli**
- **Lithuania: Vilnius**
- **Portugal: Ferreira do Alentejo**
- **Germany: Bonn**
- **Switzerland: Geneve**
- **France: Angers**
- **Slovakia: Bratislava**
- **Hungary: Budapest**

Challenges

International survey

Housing stock variations

local - international
housing types
ownership status

Climate differences

materials / design
equipment
impact on housing function

Cultural differences

different assessment
different value systems
cultural impacts on satisfaction



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Survey tool complexity

Many parameters
Integration of some objective data?
Health data for all residents



Preparation and coordination of the survey

HOW IT WAS DONE...

- Preparation of survey tools
- Sampling
- Surveyor training
- Field work
- Quality management



Survey tool system

- **Perception questionnaire on the residential satisfaction of the inhabitants (face-to-face)**
- **Inspection sheet for collecting objective housing information (by surveyors)**
- **Self-administered health questionnaire for all residents (left behind if necessary)**
- **Use of five-point Likert-scales with clear polarity and anchored ends; or continuous ranking**
- **Use of smiley faces to bridge assessment problem**



Sampling I

- **Random**
- **Population register based**
- **Specific points:**
 - **No nursing homes / dormitories / military barracks**
 - **Expected response rate**
 - **Local interest to analyse data on city-quarter level**



Sampling II - Application

Sample divided in three packages (example:)

- **800 addresses for starting**
- **Extrapolation of response rate**
- **Additional 200**
- **Additional 200 for emergency cases**

Sampling approach:



Surveyor training I

Objectives:

- understanding of survey tool system
- ability to explain the objective of the survey
- ability to explain the individual questions
- reduction of inter-rater variability
- general interview know-how
- overview of daily tasks as surveyor
- confidence in approaching the households
- basic knowledge on housing-health issues



Surveyor training II

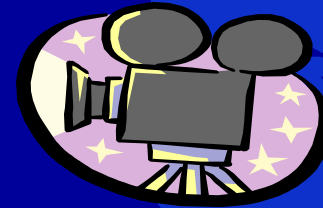
Learning experience

- **Set detailed and clear work standards**
 - **a full set is a full set**
 - **follow up and checks after interview**
 - **daily breakdown: done – scheduled – lost**
 - **an address without phone is an address**
- **Practical exercises and rehearsals**
- **Visualizing the inspection approach**



Field work I - interviews

- **Contacting households**



- **Letter: basic information on survey, sampling and their involvement**
- **Direct contact for making appointments:**
 - With phone: 50-75% success
 - No phone, personal visit: 45-60%
- **Visit of survey team (two people)**
 - 45-60 minutes
 - Application of questionnaire & inspection
 - Application / leaving behind of health questionnaire



Field work II - coordination

- **Coordination team:**
 - **Coordinator** (=> quality checks of data, response rates, work standard, quality control)
 - **Local contact person** (=> local arrangements and facilities, survey staff, translations)
- **Logistical routing and processing of incoming questionnaire sets**
- **Helpdesk with phone** (troubleshooting, re-scheduling)



Quality management

Performed by WHO representative*

- **checking of all questionnaires before entry
=> corrections to be done asap**
- **checking of data entry – random, 10%**
- **checking of data validity by calling
households – random, 1 out of 10 per team**
- **questionnaire pick up**
- **Phone call supervision (in cooperation
with local contact)**

*Geneva



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Survey results

Values for full samples – still including invalid addresses

Forli, Italy

Sample: 800

Interviews: 403 (50,3%)

Health questionnaires: 1.172

Vilnius, Lithuania

Sample: 1.100

Interviews: 687 (62,5%)

Health questionnaires: 1.798

Ferreira, Portugal

Sample: 600

Interviews: 352 (58,6%)

Health questionnaires: 1.356

Bonn, Germany

Sample: 1.000

Interviews: ca. 390 (39%)

Health questionnaires: ca. 1.000



Reasons for non-participation

- No time
- No interest
- Not good for anything
- Municipality doesn't use it anyway
- Generally negative attitude towards studies
- Too many studies, done before
- Don't want people in dwelling
- Don't want inspection walk
- Being sick / having sick person at home
- Holiday
- Other

