



Methodological aspects in risk factors surveillance: the state of the art from a global perspective



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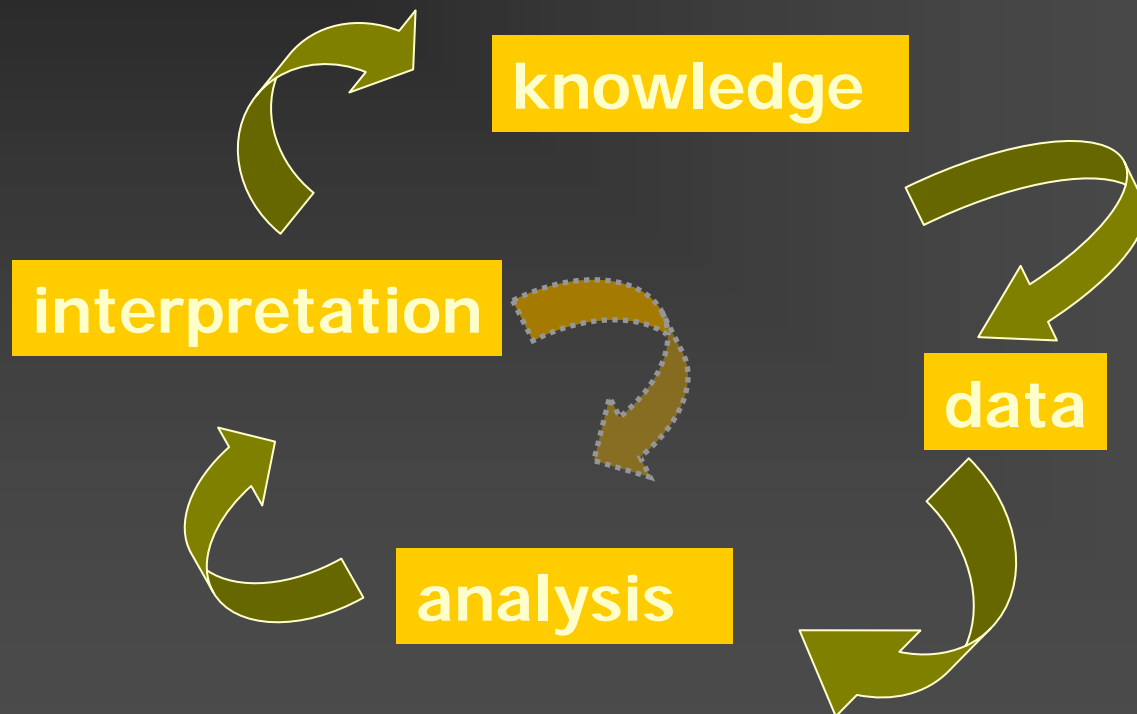
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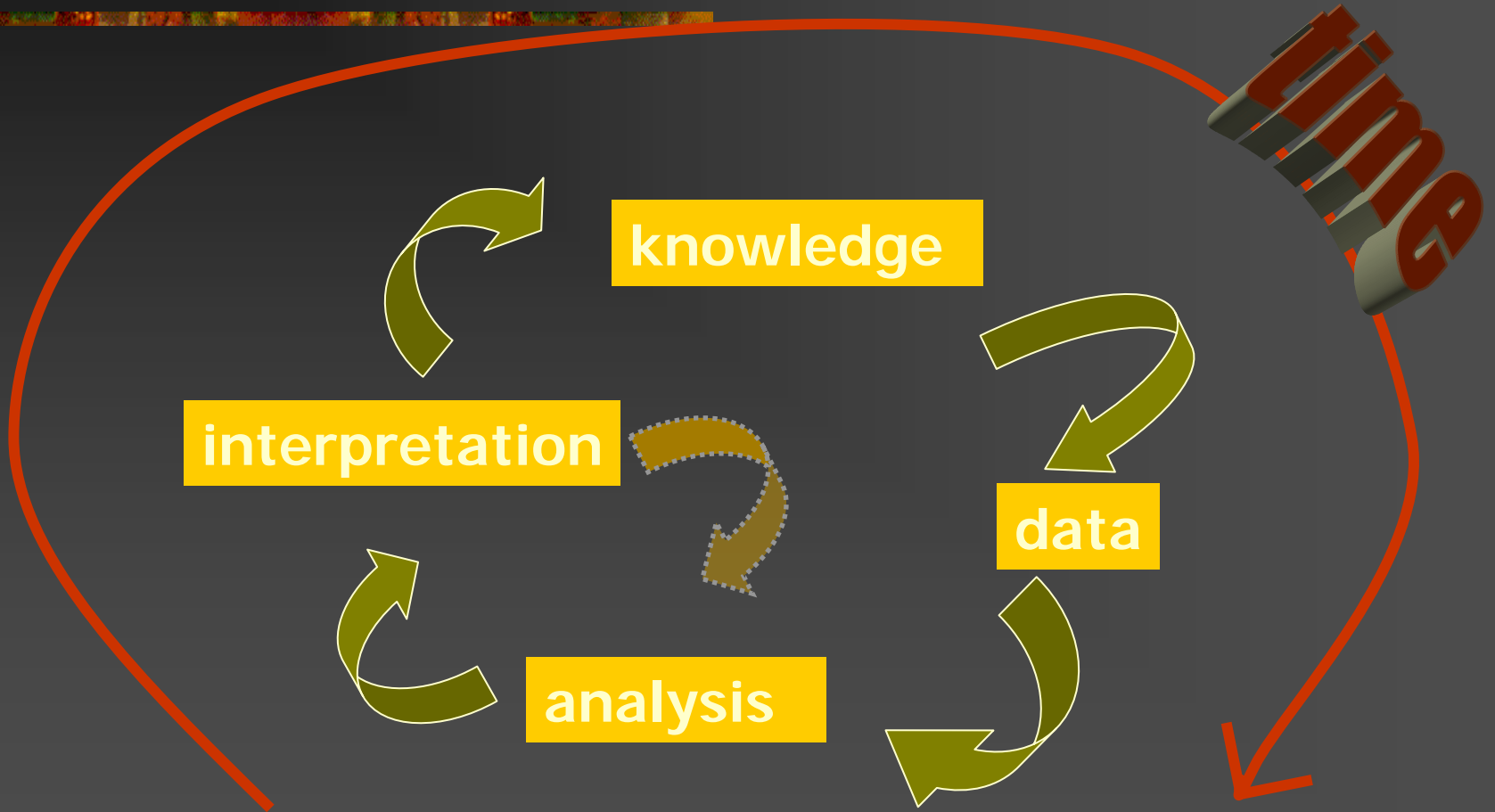
Roma, 8 febbraio 2006

Aspetti metodologici della sorveglianza sui fattori di rischio

The surveillance system



The surveillance system in action



surveillance

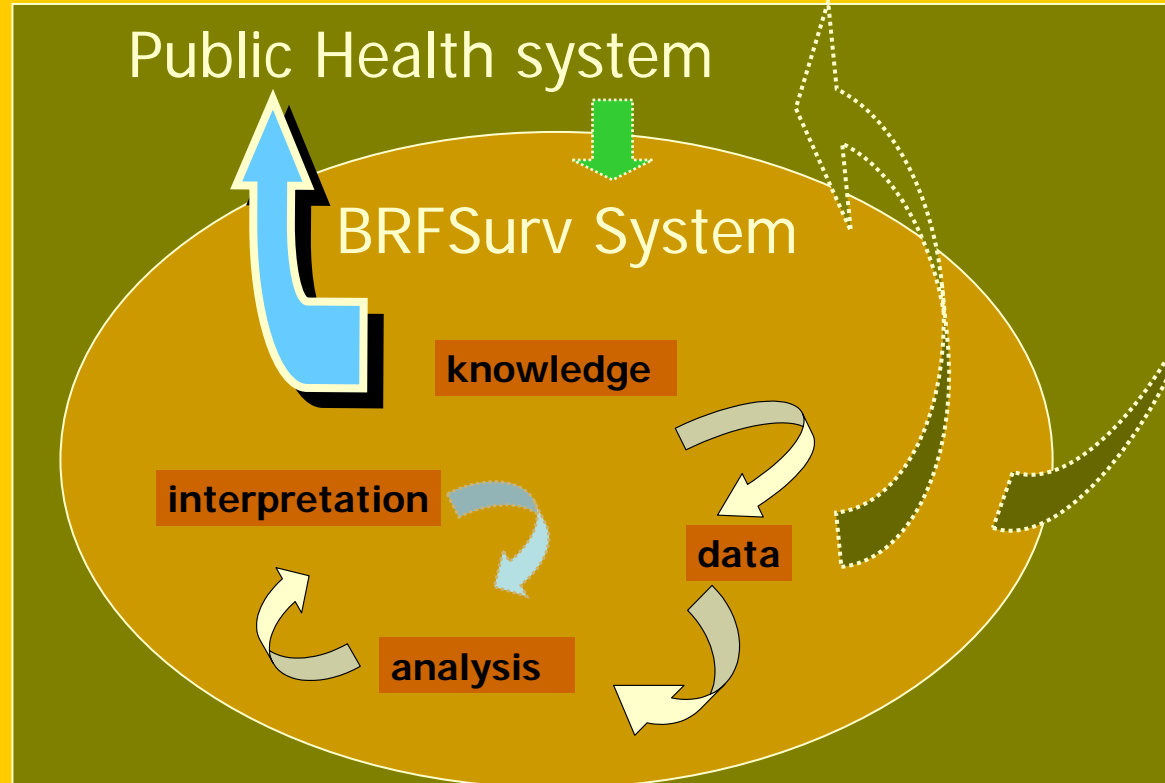


surveillance



...in a broader picture

Health (macro) system



Methods... (the state of the art)

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Most of questionnaire development	Data collection (telephone, etc.)	
Surveillance system and empowerment	Survey errors (is it all in weighting?)	

How to measure

- Social determinants
- Diet and physical activities
- Urban sprawl, etc.

Acquired, still problematic

Data collection

- Is still the telephone the best way of collecting data on HRB?



YES



NO

Be prepared to go
on cell phones...
Shorter
questionnaires?
Some advantage...

Multiple ways
of data collection



Analysis
problems

Survey errors

- Is it all in weighting? Advantages and disadvantages
- Need for errors measurement AND control

Acquired, still problematic

Methods... (the state of the art)

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Surveillance approach (importance of time perspective, etc.)	How to measure ...	Data analysis1: Small area data
Most of questionnaire development	Data collection (telephone, etc.)	Data analysis2: Interaction - complexity
Surveillance system and empowerment	Survey errors (is it all in weighting?)	Integration (data/info linkage – complex analysis)

Data analysis 1: small area statistics

- Need for information at local level
- Statistics can help (nothing completely new, already developed in other fields)
- Importance of GIS
- Time can (should) be considered as a variable that can help in 'borrowing' information

Challenging

Data analysis2:

analysis of interactions and complexity

- Need for more data (or more sophisticated techniques)
- Data mining (no new statistics, still an interesting approach)
- The challenge: analysis of interaction over time (a possible solution for some important puzzle)
- Optimal sampling

Challenging

Integration

- Data linkage, but also
- Information linkage
- A problem for data analysis
- ...

Challenging



Running surveillance as a system

... important links:

- international network
- national (broad and specific) scientific community
- national statistical system(s)
- local/regional/national public health and health system