A black and white photograph of a busy street in Turin, Italy. In the foreground, a tram is visible on the right side, moving towards the viewer. The street is filled with a large crowd of people, including men, women, and children, some walking and some standing. The background shows classical architecture with columns and arches, typical of an urban setting in Turin.

**A participatory process for promoting  
equity in urban health in Turin**  
**Which are the policies with the highest potential  
to equally improve health in an urban setting ?**

***Giuseppe Costa,***

*Osservatorio epidemiologico Regione Piemonte, Università di Torino*  
*Working team: Roberto Dimonaco, Nicolás Zengarini, Morena Stroscia,*  
*Silvia Pilutti, Annalisa Magone,*



## A case study

The Turin case-studies (H2020 Mindmap and EuroHealthy) aim to engage and involve policy makers of the city in developing **an exercise of “priority setting”** in order to select policies and actions that are more promising in reducing health inequalities.

## Rationale

Using health inequalities as a guide to identify achievable health potential benefits in the city of Turin: if somebody has done better... it can be done!

## What message and what evidence?

The last 40 years of the history of the Turin social and health profiles have been compared in a recently published review of health inequalities.



Based on data from the **Turin longitudinal study** (an epidemiological surveillance system which allows to associate social and health carriers of individuals and families linking administrative data at individual level)

# Turin Longitudinal Study (TLS)

Turin: about 900,000 inhabitants, North-West of Italy

## TLS records for 2,391,833

persons who were resident in Turin since  
1971 to August 2014.

Individual record linkage between:

### Socioeconomic information

Population census 1971  
Population census 1981  
Population census 1991  
Population census 2001  
Population census 2011

### Health outcomes

causes of death (1971-2014)  
hospital admissions (1995-2014)  
cancer registries (1986-2010)  
diabetes registries (2002-2011)  
outpatient visits (2000-2012)  
drug prescriptions (1997-2012)

## ■ Stakeholders directly and indirectly engaged

Area	Participants	Receiving information
<b>Public administration</b> <ul style="list-style-type: none"> <li>- Region, Municipality</li> <li>- social and welfare, education, environment, ICT, employment, household</li> <li>- local health authority</li> <li>- Innovation and smart city</li> </ul>	18	48
<b>NGOs</b> <ul style="list-style-type: none"> <li>- lenders and donors (banks and foundations), start up, Church, migrants health network</li> </ul>	18	37
<b>University and research centers</b>	14	21
<b>Labour unions</b>	6	11
<b>No profit</b>	3	12
<b>Mass media</b>	1	8

# What message and what evidences?

1.

sempre più  
longevi e un  
po' più uguali:  
una risorsa  
di salute per  
lo sviluppo

## HEALTH PROFILE

- Trend
- Social determinants
- Compared to other European cities

2.

il territorio  
- risorse  
e capacità  
per la salute

## WHERE YOU LIVE

- Geographical inequalities
- Segregation
- Environment
- Vulnerability
- Violence and accidents

3.

la persona  
- risorse  
e capacità  
per la salute

## WHO YOU ARE

- Family
- Household
- Employment
- Income
- Education
- Healthcare
- Immigrants
- Life course

4.

la salute  
dei torinesi  
alla prova  
della crisi

## WHAT NEXT

- Crisis
- Future perspectives

# The process

22 November 2016

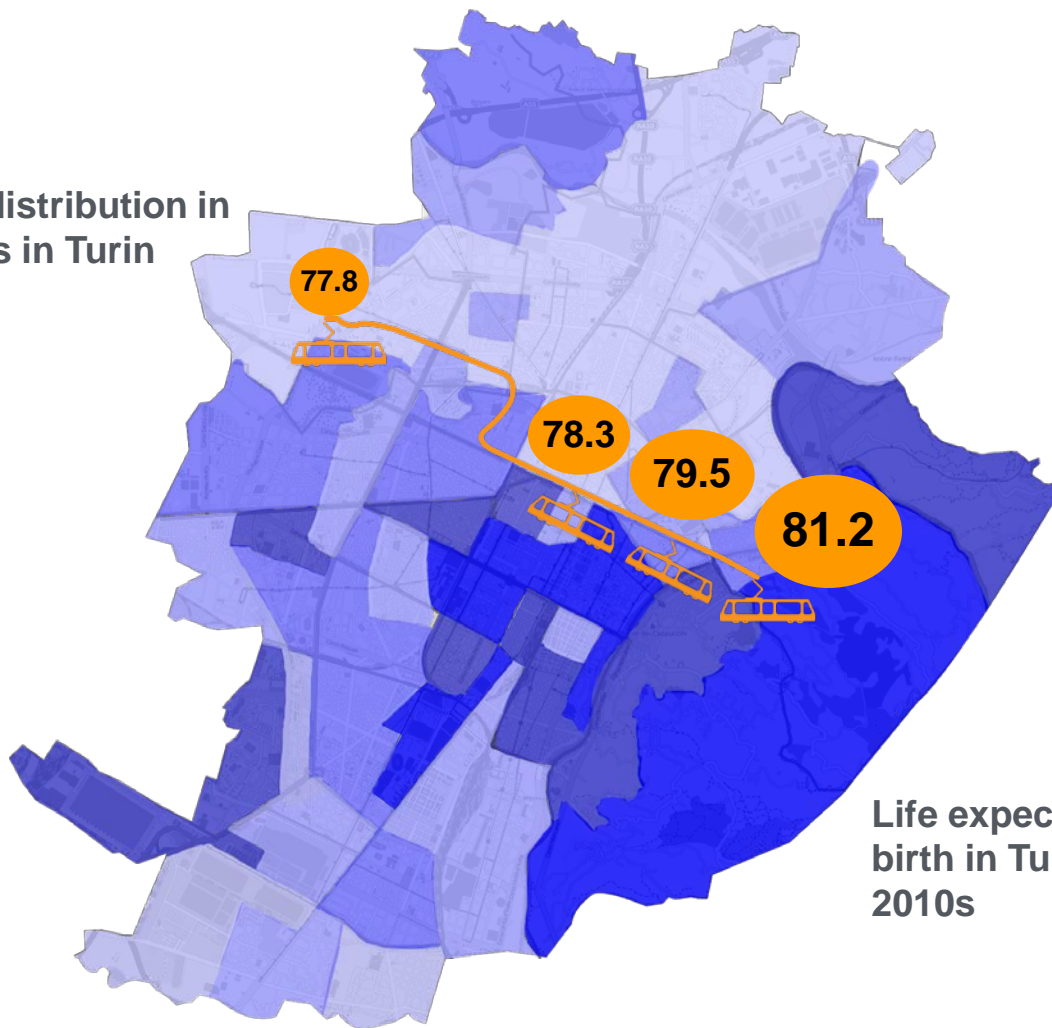
## Knowledge transfer and dissemination

- General presentation of scientific data and evidences
- To understand health status of Turin population and inequalities.
- Presentation of **MINDMAP** and **EURO-HEALTHY activities**

## LISTENING & ENGAGEMENT



Income distribution in  
the 2010s in Turin

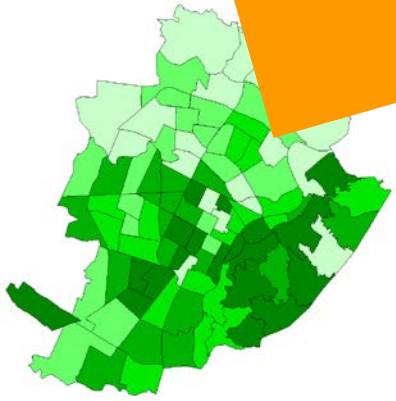


Life expectancy at  
birth in Turin in the  
2010s



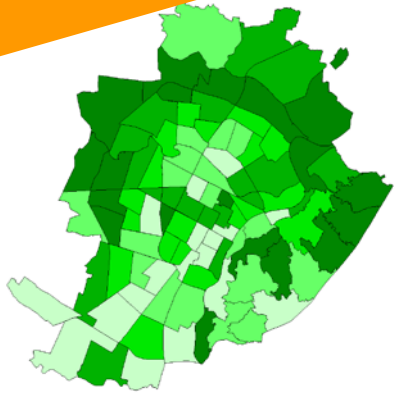
# Inequalities in life expectancy at birth time

**A successful story**



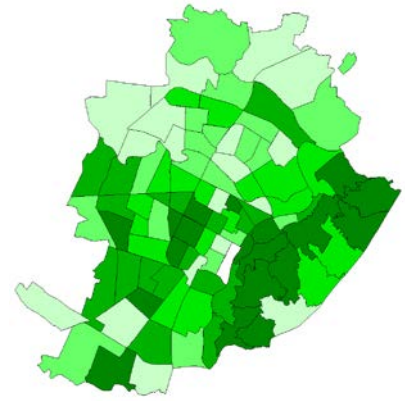
61.0755 - 68.3343	68.3543 - 69.3204	69.3355 - 70.0993
70.1332 - 71.3656	71.4090 - 88.6028	

**1970s**



0.050295 - 2.739000	2.741500 - 2.895000	2.916000 - 3.079000
3.089000 - 3.332500	3.338500 - 7.235000	

**Improvements in life expectancy in 40 years**



75.1894 - 78.0143	78.1032 - 78.9489	78.9537 - 79.6206
79.6213 - 81.0250	81.0376 - 102.0602	

**2010s**



# Diseases more associated<sup>1</sup> with housing deprivation

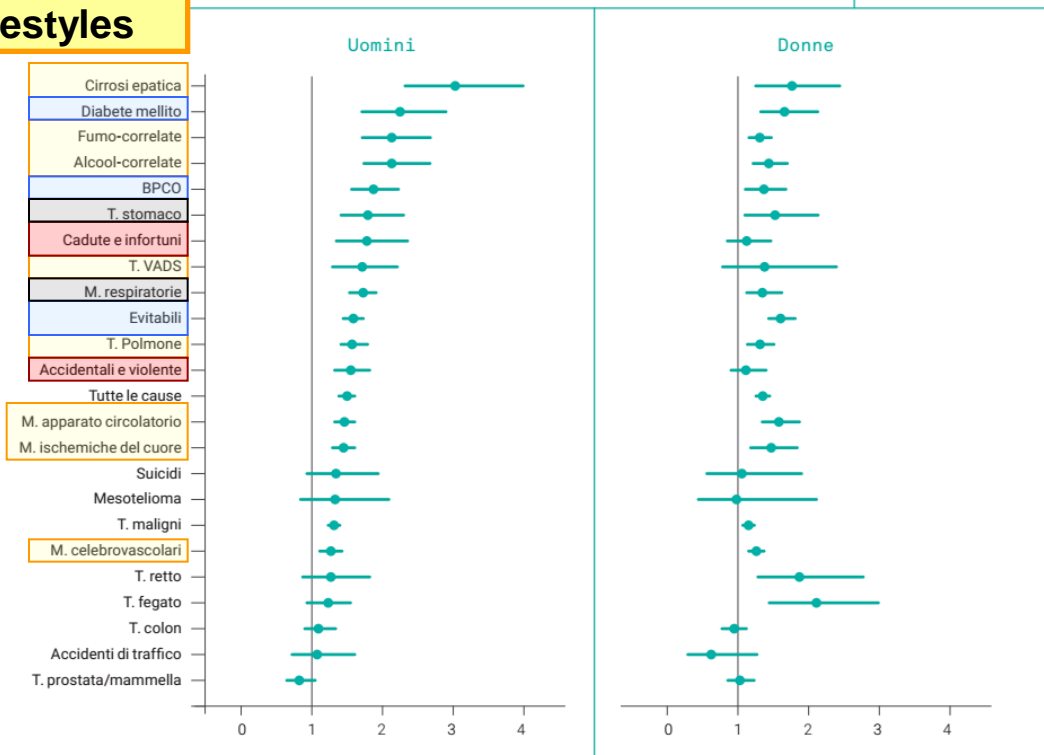
Figura 6. Rischi relativi di mortalità per causa di morte secondo la condizione abitativa disagiata (rispetto ad agiata=1) per genere. Torino, 2007-2011, età 30-99 anni.

## Unhealthy lifestyles

Barriers to prevention and care

Safety and security

Poverty and overcrowding



# The process

14 December 2016

## a. **Understanding the causal pathways**

Stakeholders were offered deepened presentations of thematic areas

1. Life course approach (early life, migrants, elderly, education)
2. Access to health (employment, health care, income, education)
3. Structures (household, environment)

## b. **Concrete experience** from the territory. Analysis and voices from the stakeholders **Interdisciplinary work groups** sharing experiences & best practices,

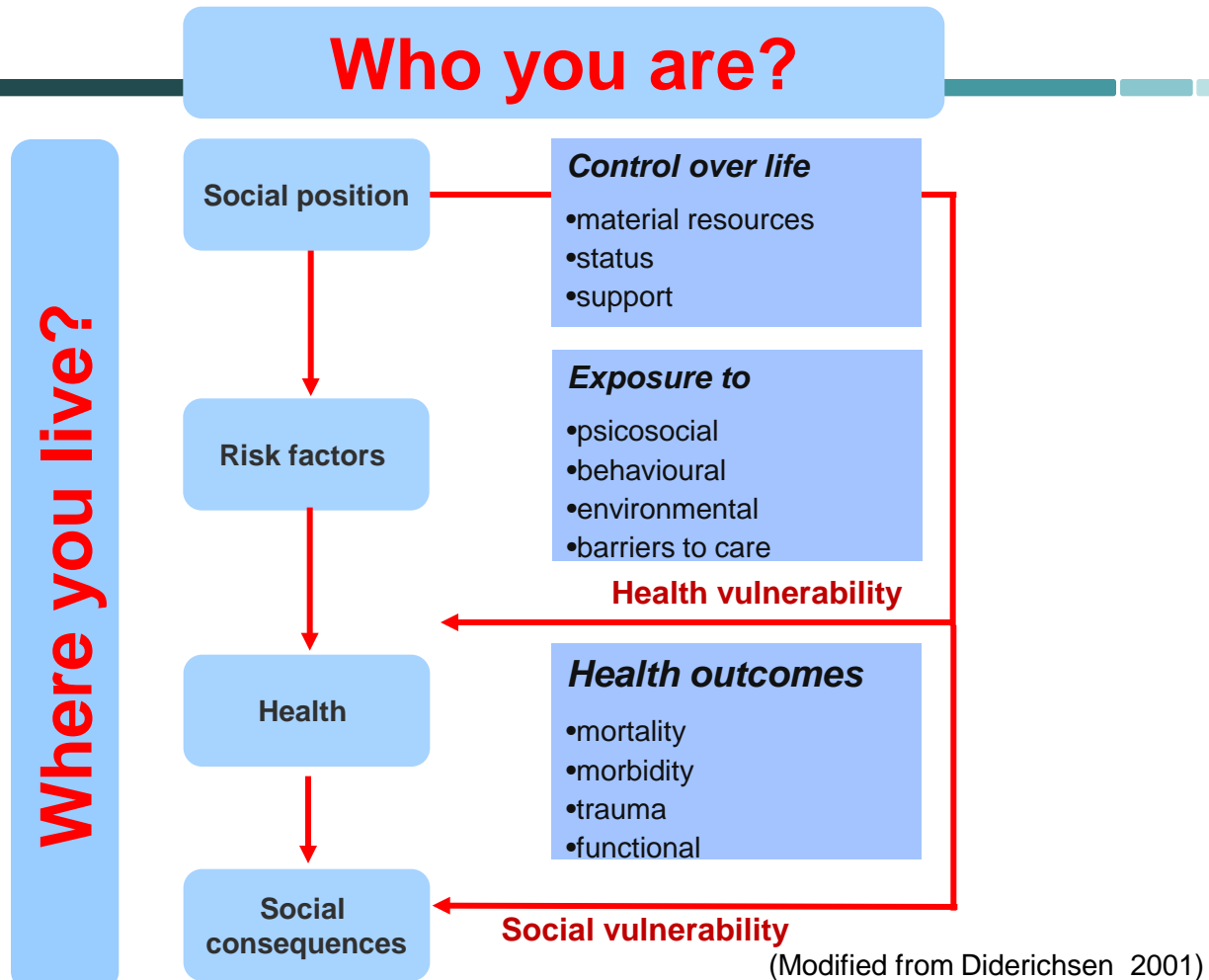
*Identifying problems, strength and opportunities, challenges and weakness*

## RAISING AWARENESS



## TEAM BUILDING & COMPARE





# Who you are?

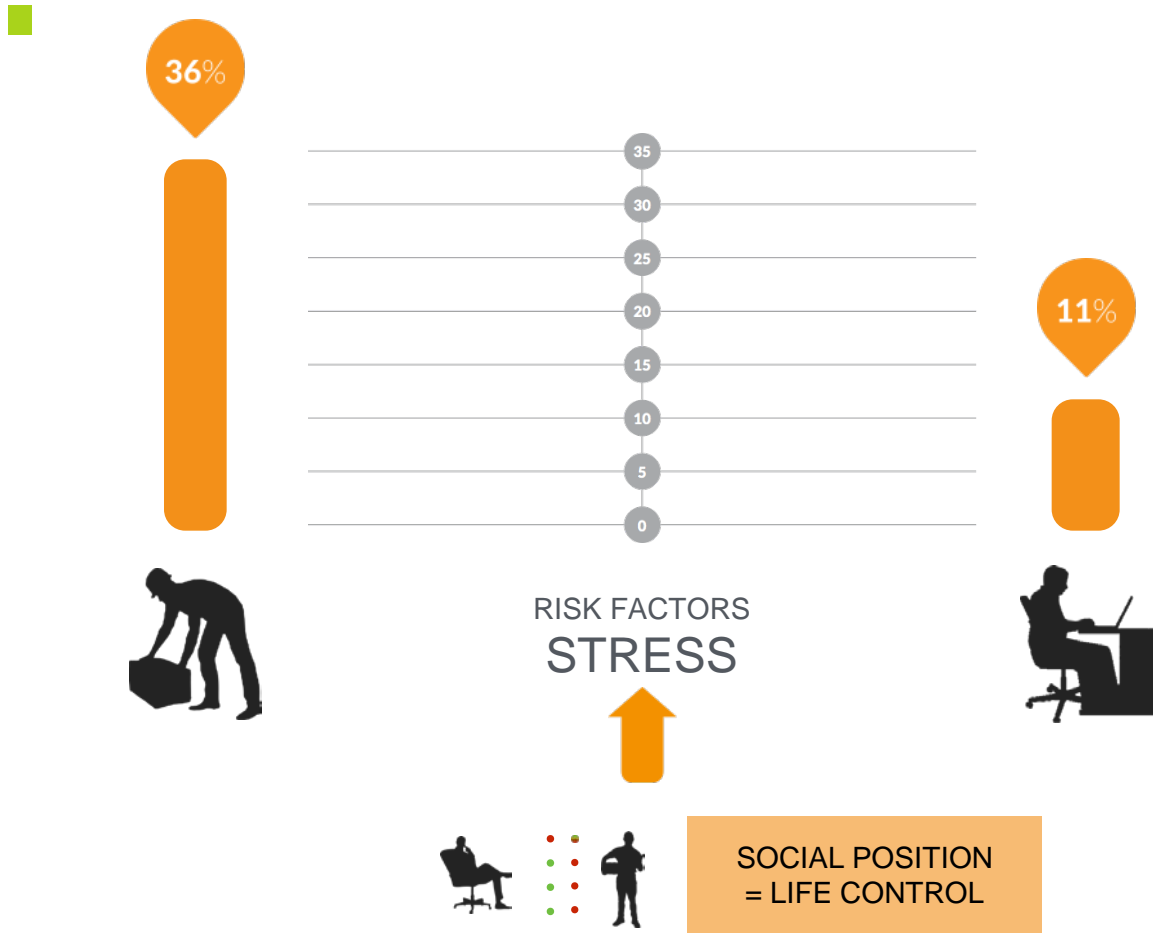


- DEMAND
- CONTROL
- REWARD
- SUPPORT

- DEMAND ●
- CONTROL ●
- REWARD ●
- SUPPORT ●

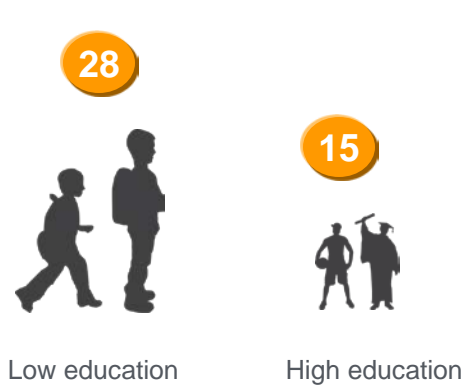


# Job strain among the male workforce in Torino



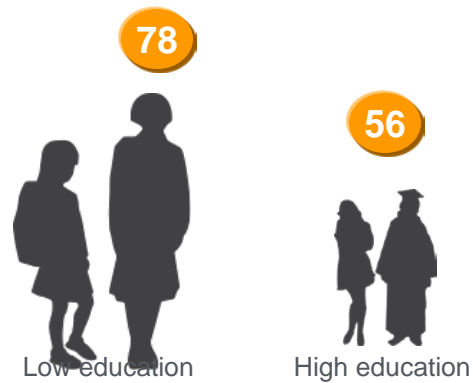
## Smokers in Italy

■ Males 2015



## Overweight in Italy

Females 2015



RISK FACTORS  
LIFESTYLES



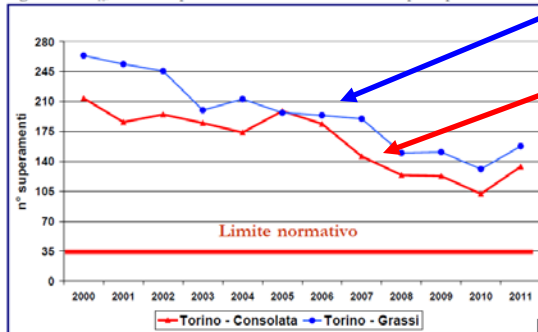
SOCIAL POSITION  
= LIFE CONTROL

Centralina Grassi

Centralina Consolata

## PM10

Figura 2 - PM<sub>10</sub>, numero superamenti del valore limite di 24 ore per la protezione della salute umana



Fonte: Arpa Piemonte

RISK FACTORS  
ENVIRONMENT

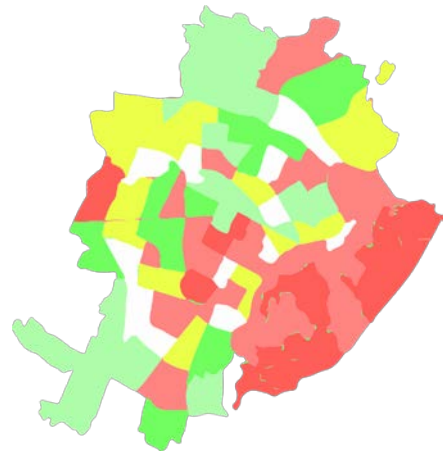
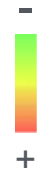
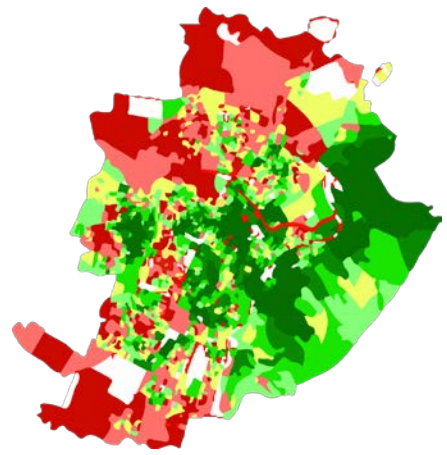


SOCIAL POSITION  
= LIFE CONTROL



# Acute coronary disease In Torino, 2009

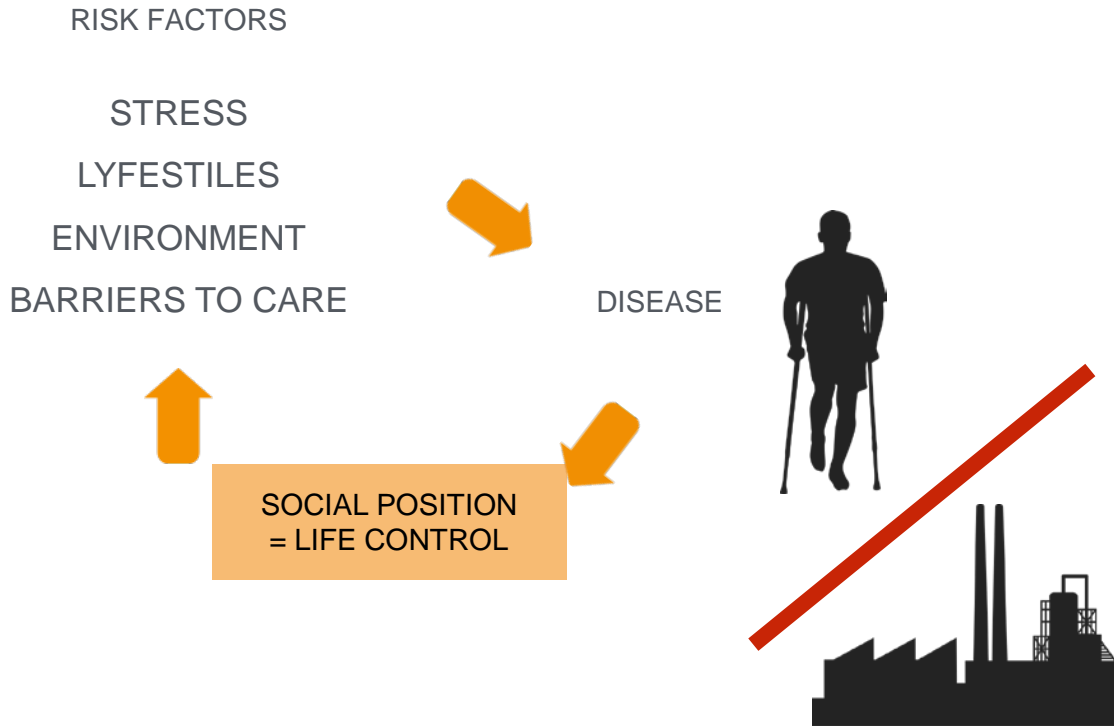
# Coronary revascularization In Torino, 2009



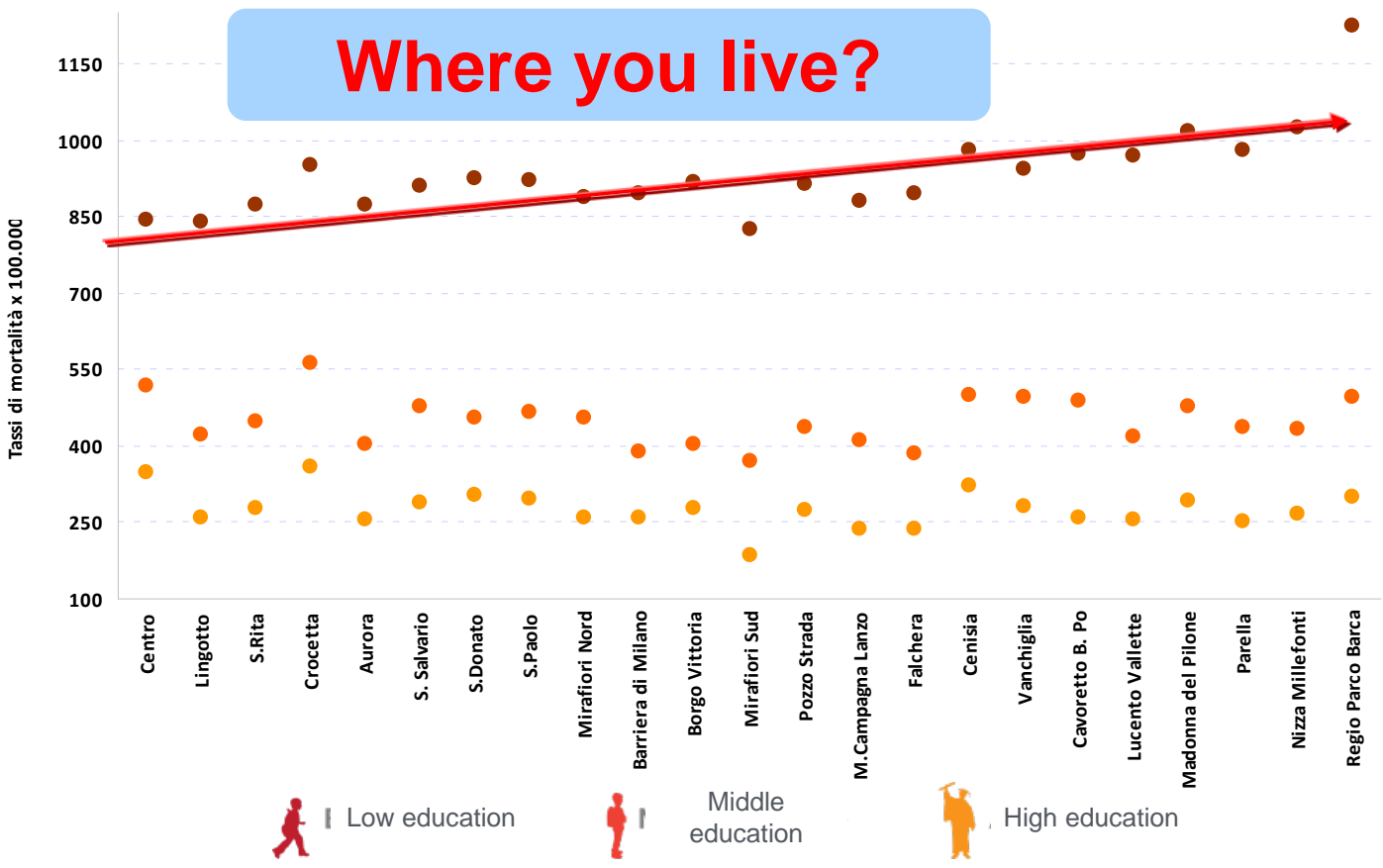
RISK FACTORS  
BARRIERS TO CARE



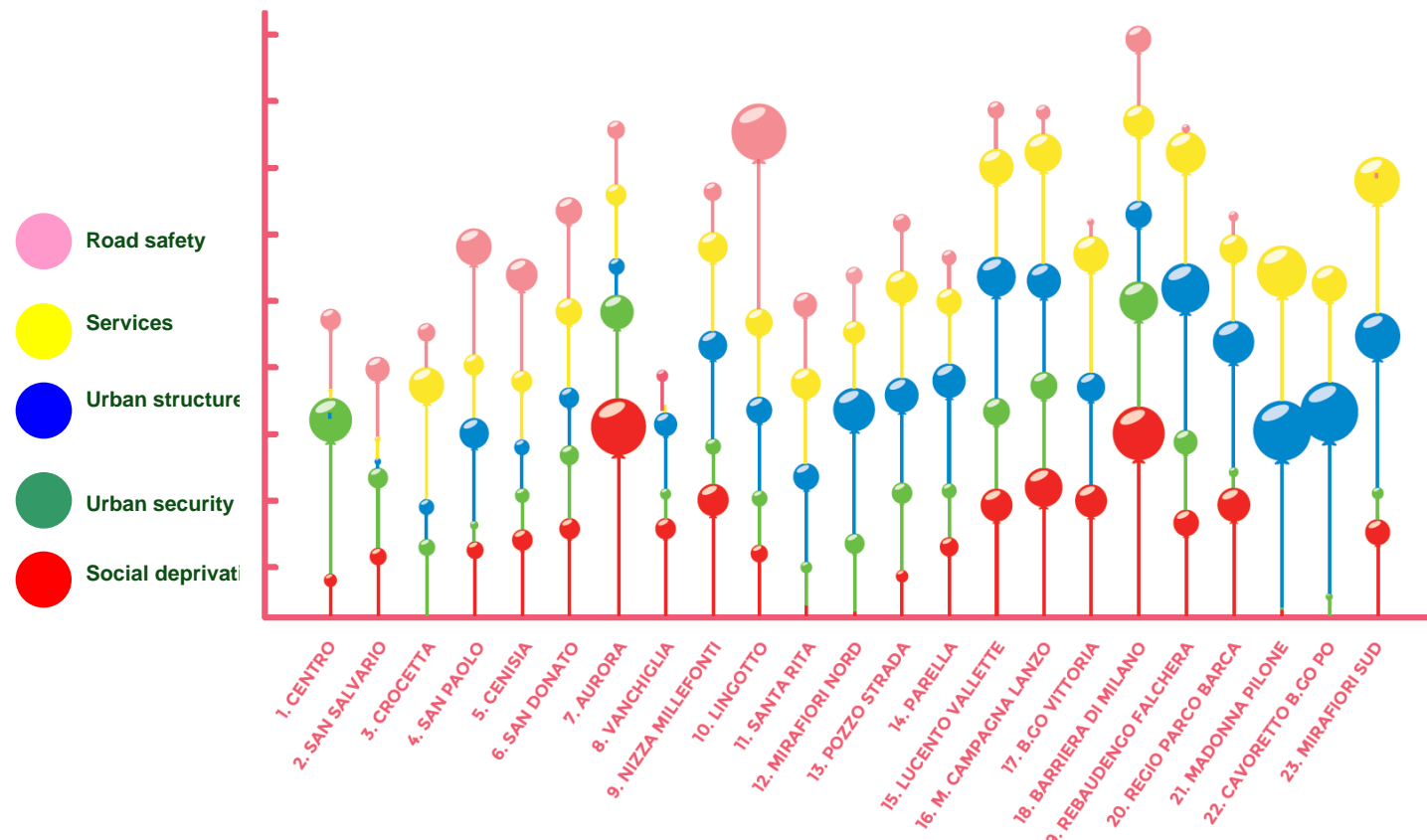
SOCIAL POSITION  
= LIFE CONTROL



# Educational inequalities in mortality by neighbourhood in Torino (1972-2012)



# ■ Axes of wellbeing (SDH) in Turin by neighbourhood



## The process

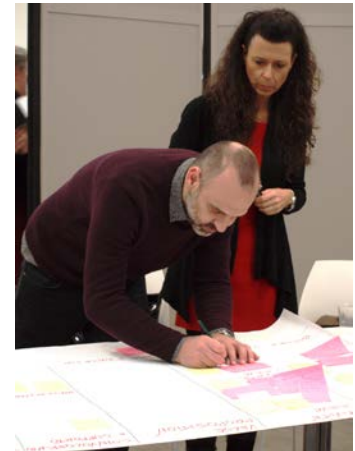
12 January 2017

Aimed at developing a common **policy framework** to orient decisions and concrete actions towards measurable health outcomes

- defining problems, solutions, resources, responsibilities, tools and methods for action
- developing a participative approach

To propose potential inter-sectoral actions

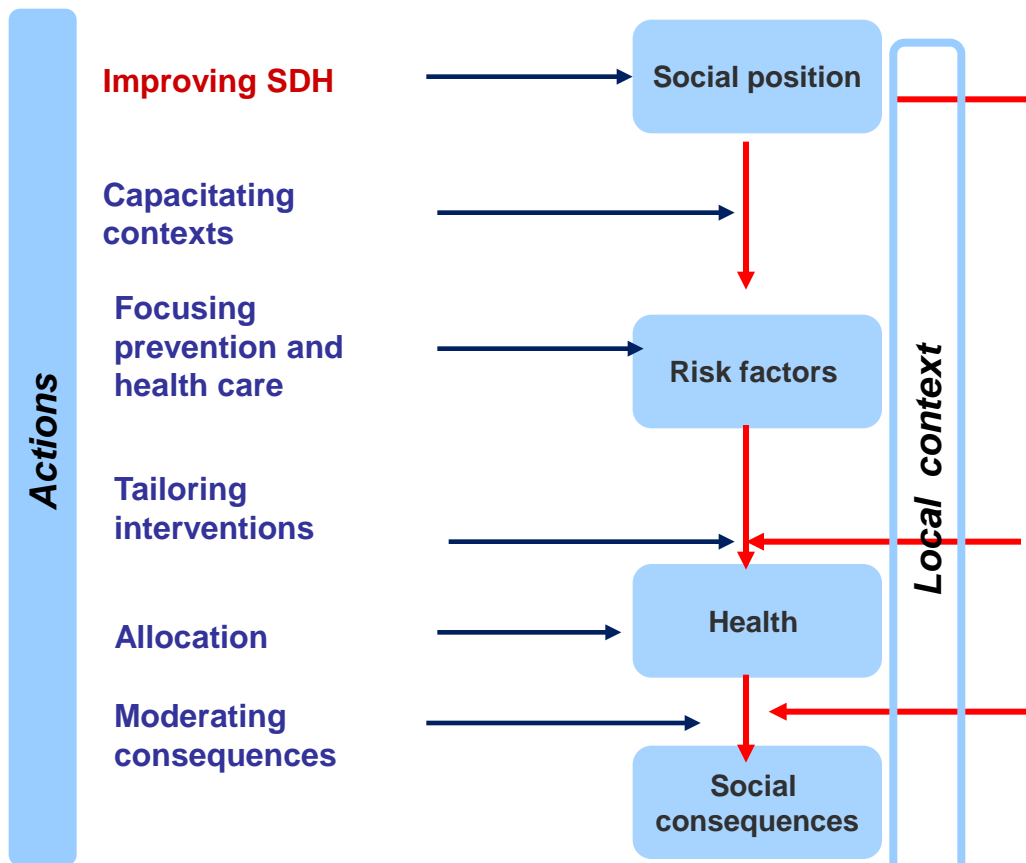
## FROM THEORY TO ACTION



What to do?  
How to do?



# Policy framework for actions

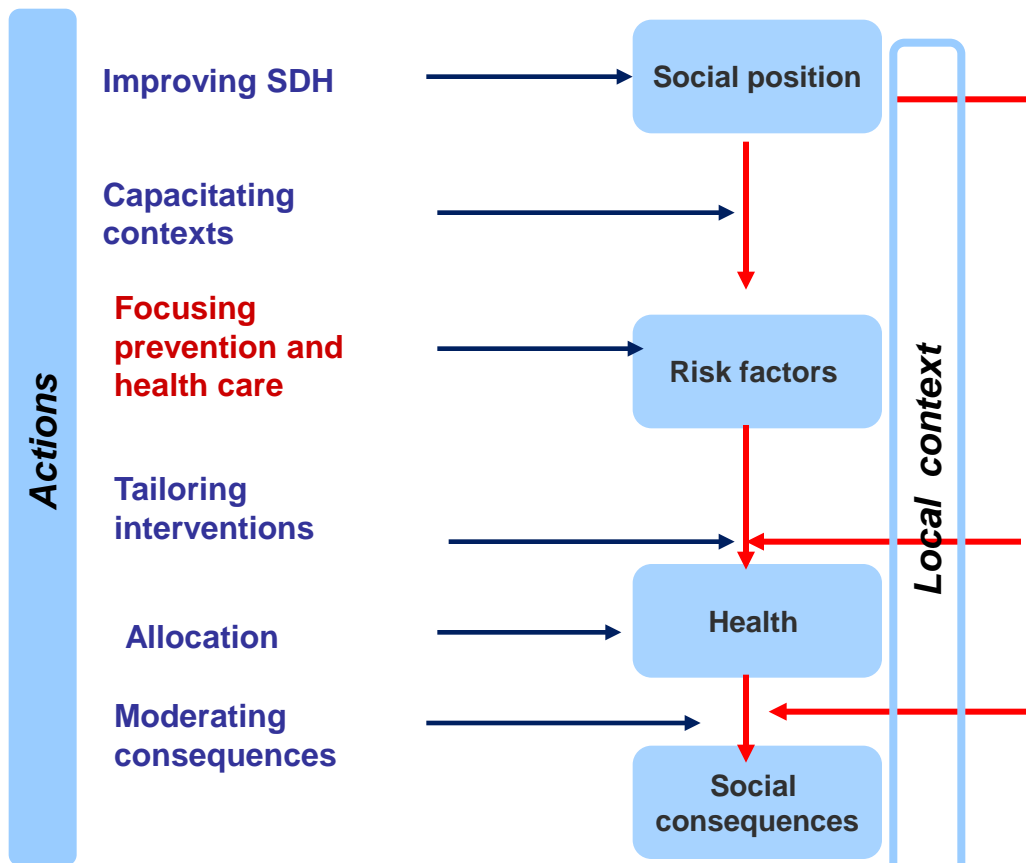


(Modified from Diderichsen 2001)

# Differences in life expectancy at 65 anni by social class



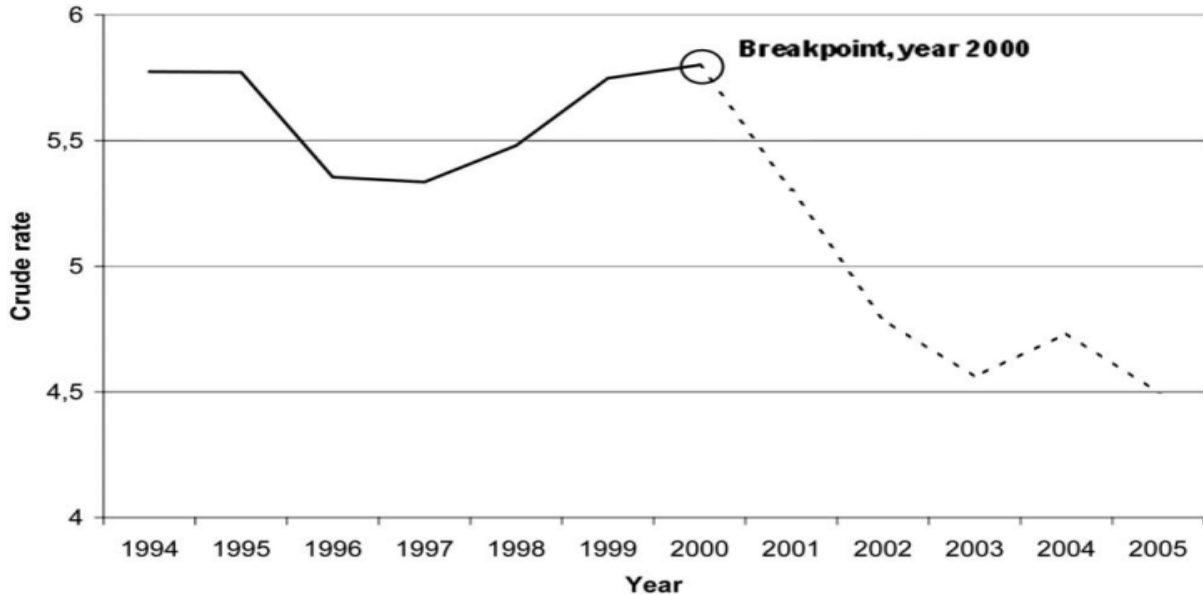
# Policy framework for actions



(Modified from Diderichsen 2001)



## Work injuries in the construction industry before and after implementation of the European directive on safety in the eight regions early complying to the directive



**Figure 2** Early intervention regions' crude serious injury rate

## Compliance to guidelines in the integrated pathway of care of the DIABETES in Turin

Less mortality

Less  
inequalities

Same costs

Potential for  
improvement

**Mortality**

**Inequality**

**Cost**

**Coverage**

RR

RR

RR

%

**MMG + Diab +  
LG**

1

1.11

1

40%

**MMG + Diab**

**1.29**

1.15

1.14

60%

**MMG**

**1.72**

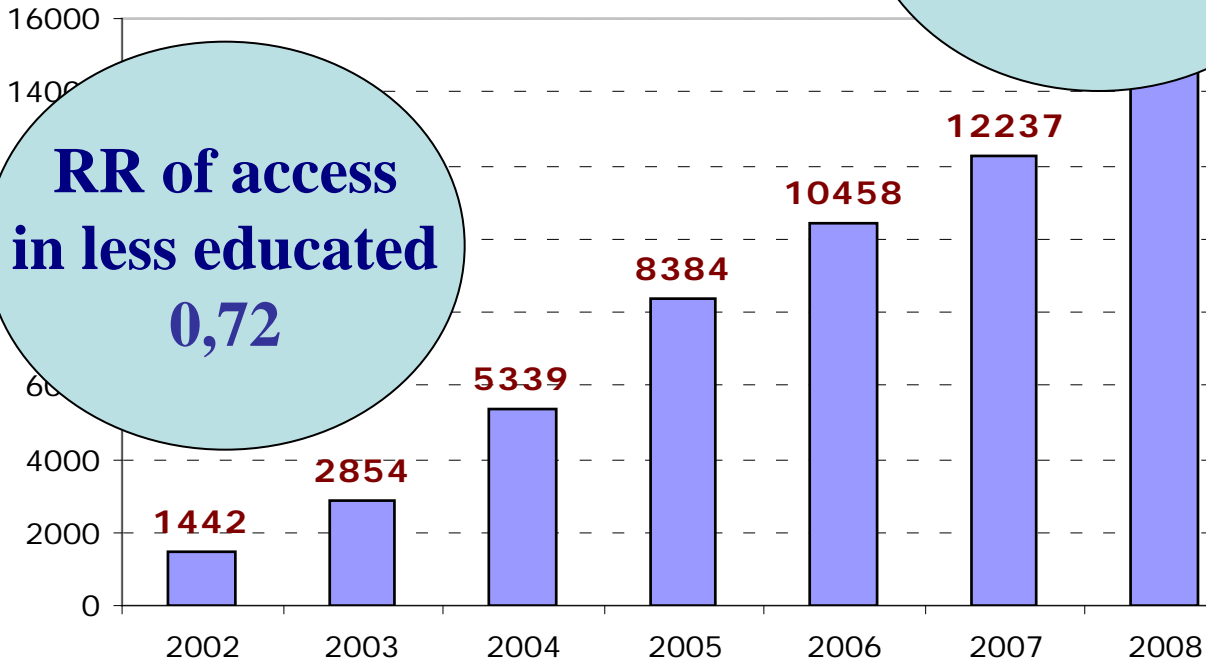
**1.30**

1.03

Gnavi, 2013



**RR of access  
in less educated  
1,27**



**RR of access  
in less educated  
0,72**

## The process

17 march 2017:

### Plenary session, open meeting

- Official presentation of the monograph to the city
- Stakeholders present the outcomes of the project
- The main policy makers take up responsibility to drive and bring the change
- **How to choose priorities?**

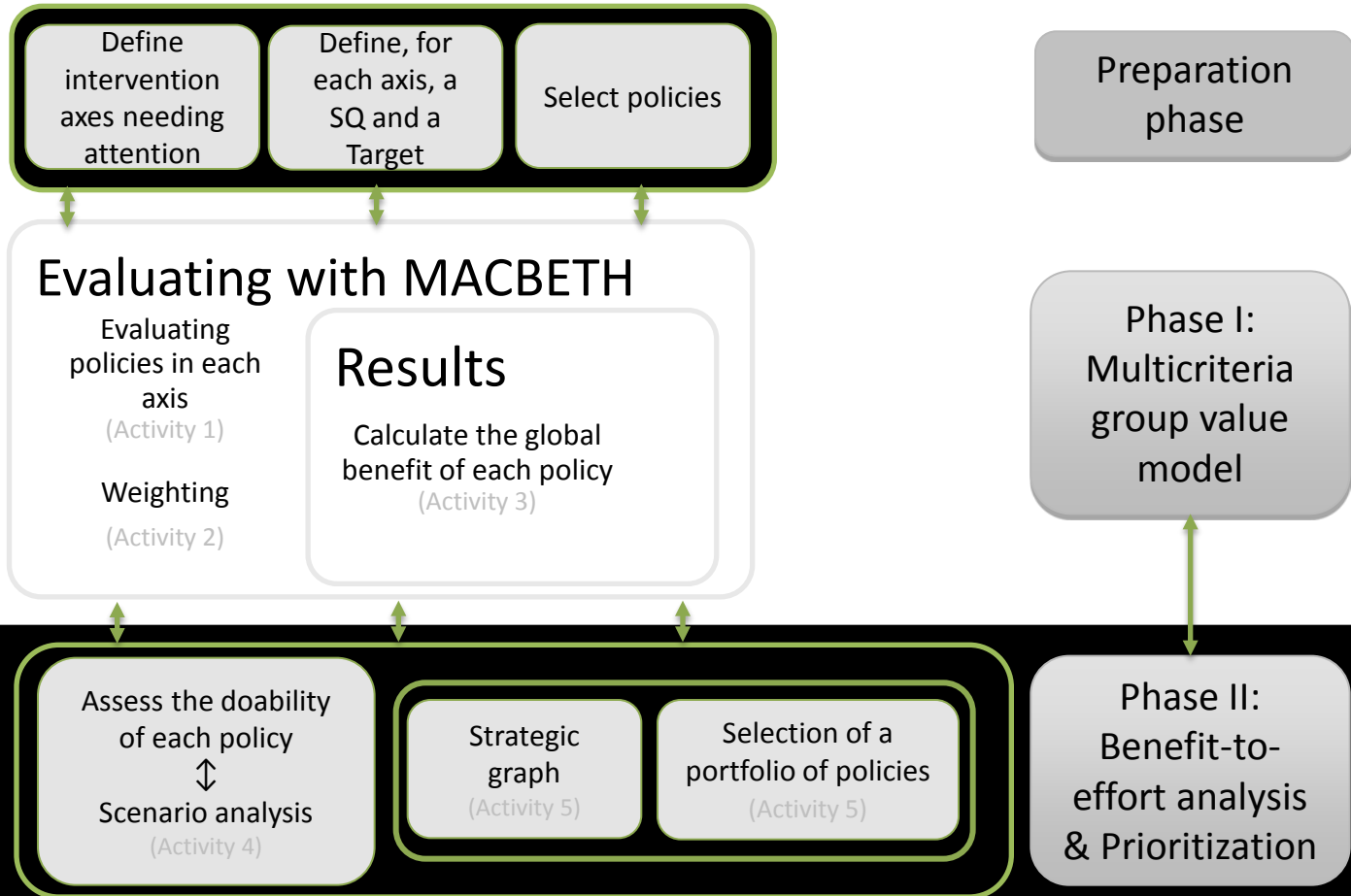


**PUBLIC  
COMMITTMENT**

■  
Out of the MINDMAP community 15 of the most influential stakeholders and decision makers were engaged in the **Euro-Healthy Turin case-study**.

Policy area	Participants
<b>Public administration</b> <ul style="list-style-type: none"><li>- Municipality</li><li>- social and welfare, education, environment, ICT, employment, household</li><li>- local health authority</li><li>- social housing authority</li><li>- Innovation and smart city</li></ul>	9
<b>NGOs</b> <ul style="list-style-type: none"><li>- lenders and donors (banks), start up, migrants health network</li></ul>	3
<b>Labour union</b>	2
<b>No profit</b>	1

# Methodology that supports the selection of a portfolio of policies (EuroHealthy)



## 8 main axes of health inequalities (SDH) were identified as relevant at the city level:

Being well educated

Being employed

Having a good quality of work

Having adequate material resources


Having adequate housing

Having adequate family network

Living in an adequate physical environment

Living in an adequate social environment

# • Intersections between policies and axes of inequalities (SDH) were identified to prepare

Areas of concerns	AXIES (Social determinants of health)							
	Occupational conditions	Education	Income	Family / household	Housing and Living conditions	Quality of work	Built Environment	Social Context
<b>Indicators for the SQ definitions</b>	(unemployment)	(low education)	(distribution below average)	(loneliness and frail in elderly people)	(bad living conditions)	(manual workers)	(Indicators of Accessibility )	(Rate of social and physical disorders notified to or discover by the police )
<b>Policies / intervention</b>								
<b>Policies for Quality of Work and Organizations</b>								
Promozione della qualità nel lavoro	x					x		
Conciliazione e servizi territoriali, orari e accessibilità	x		x	x		x	x	
Alternanza scuola lavoro	x	x	x			x		
<b>Employment Integration Policies</b>								
Gestione di incontro domanda-offerta e servizi per il lavoro	x		x	x	x			x
Orientamento	x	x				x		
Formazione professionale	x	x				x		
<b>Social protection policies and empowerment</b>								
Sostegno al reddito			x	x	x			x
Risposta alla domanda sociale di abitazioni					x		x	x
Integrazione sociale per migranti e richiedenti asilo	x	x	x	x	x	x		x
Sostegno di comunità per donne e minori	x			x				
Strategie di inclusione attiva e promozione di comunità	x	x		x			x	x
<b>Policies for education and cultural promotion</b>								
Contrasto all'abbandono scolastico e di integrazione	x	x	x			x		x
Promozione della crescita socio-culturale dei giovani	x	x				x		x
Politiche di supporto economico allo studio	x	x						
<b>Policies for the Quality of the Living Environment</b>								
Riduzione dell'inquinamento e aumento salutogenicità					x		x	x
Miglioramento delle aree verdi							x	x
Riqualificazione spazi abbandonati							x	x
<b>Health and social integration policies</b>								
Servizi e residenze per anziani non autosufficienti				x	x		x	
Promozione della domiciliarità				x	x		x	x
 <small>in The ERDF and ERDF support the second lead to form the European</small> in The ERDF and ERDF support the second lead to form the European in The ERDF and ERDF support the second lead to form the European in The ERDF and ERDF support the second lead to form the European	x		x		x	x		x



# EXPECTED BENEFIT FROM THE POLICY IN REDUCING HEALTH INEQUALITIES

## INTERVENTION ON THE QUALITY OF WORK AND WORK ORGANIZATION

Nulla

Molto debole

Debole

Moderato

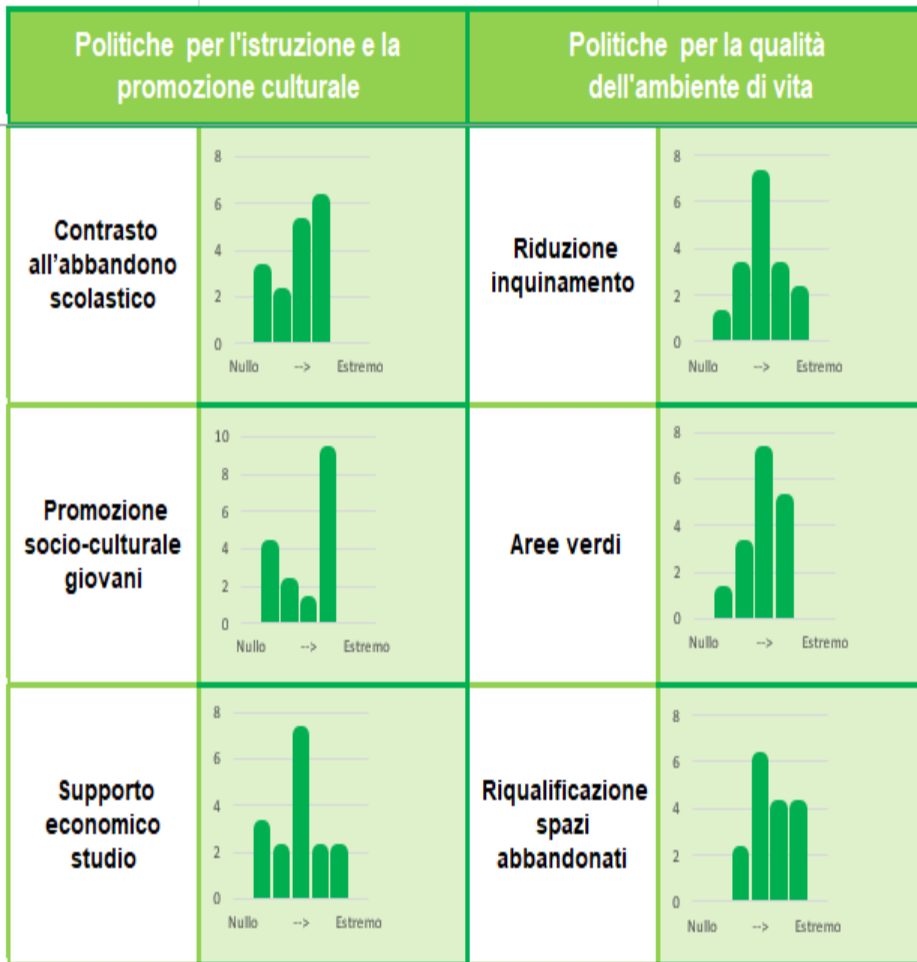
Forte

Molto forte

Estremo

### FATTORI DI RISCHIO

	Condizione occupazionale	Qualità del lavoro	Istruzione	Reddito	Condizione familiare	Condizione abitativa	Ambiente costruito	Ambiente sociale
Qualità nel lavoro								
Conciliazione								
Alternanza scuola lavoro								

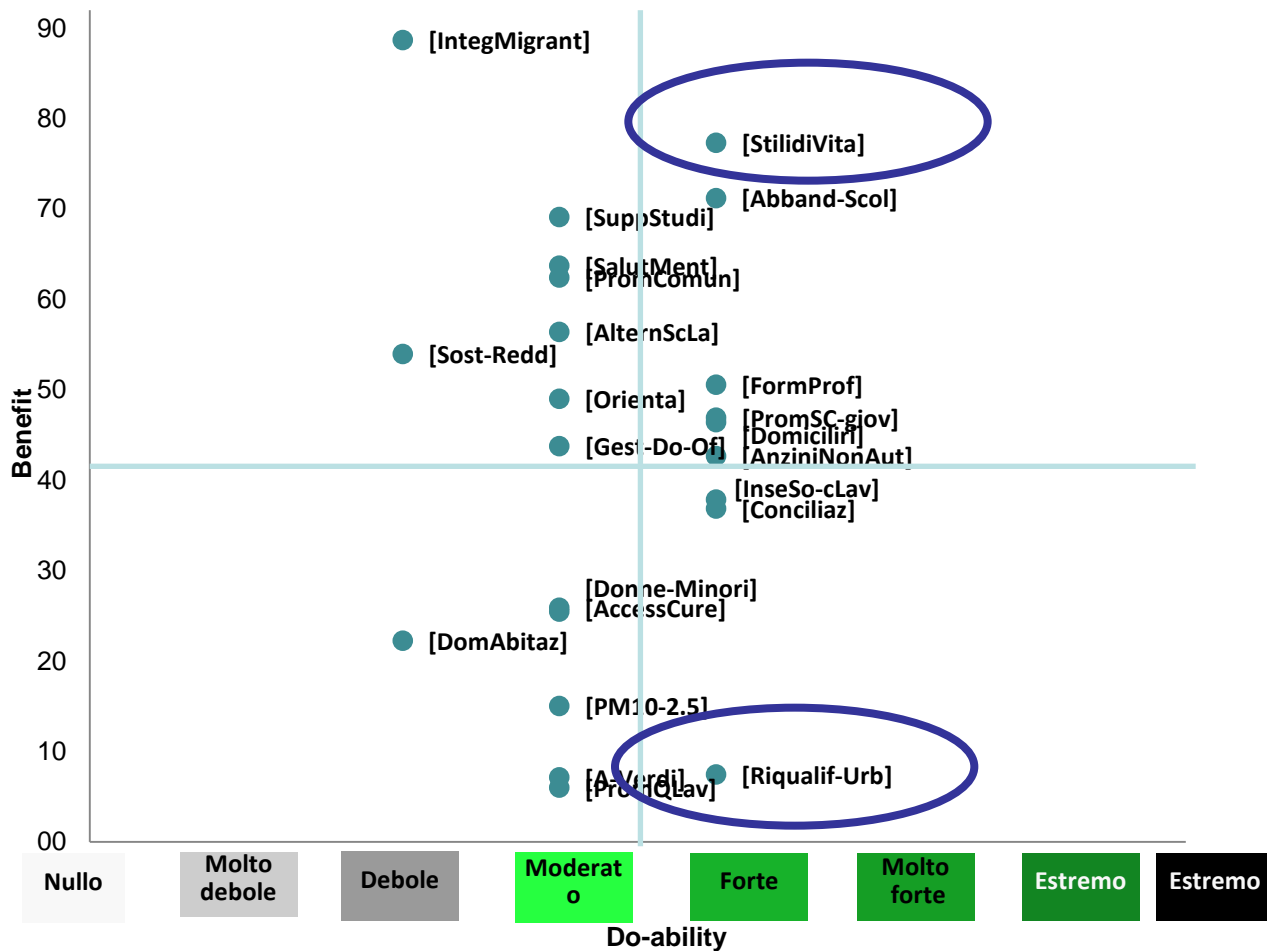


## EXPECTED DOABILITY OF POLICIES



Social Determinants	% of deaths attributable to inequalities	Absolute number of death per year
Education	35%	408
Family / household	22%	172
Income	17%	149
Quality of work	10%	38
Housing and Living conditions	7%	77
Employment condition	5%	47
Social Context	5%	63
Built Environment	2%	15

# BENEFIT VS DO-ABILITY



# What next?

- 
- Sensitivity analysis of priority setting in different
  - expected scenarios
  - health dimensions (mental health vs mortality)
  - time perspective (short-long) and latency
- Joint effort (social, housing, health care) for an integrated urban strategy towards more equity in health
  - piloting on a deprived area with the same participatory approach (Vallette)

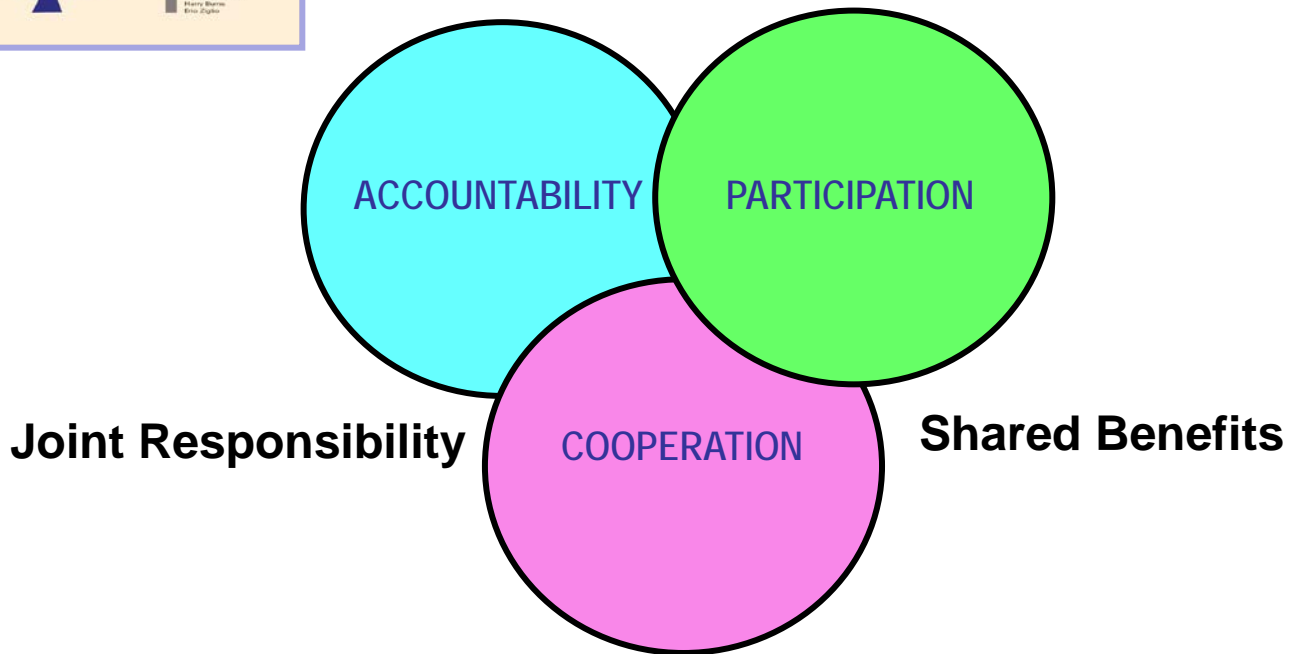
1. ■ Putting (health) Equity 'on' the Agenda DONE!

2. Keeping (health) Equity 'in' Policies

**How do we make joint investments  
for equity in health work in practice ?**

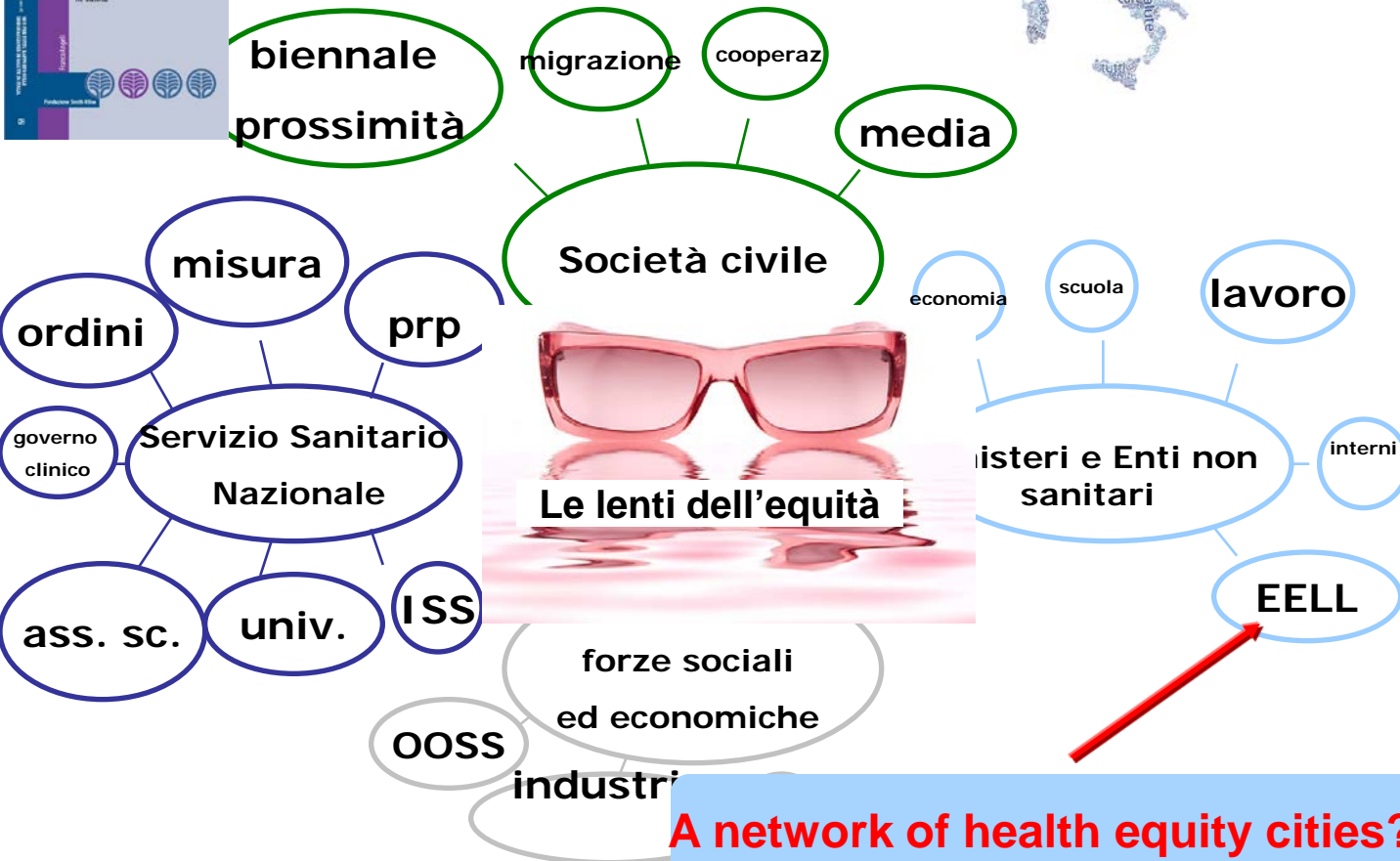


## Co Production





**L'ITALIA per L'EQUITÀ nella SALUTE**  
INMP, 1 dicembre 2017



**A network of health equity cities?**



# Closing the gap in a generation



**Italy engaged in coordinating the new European Joint Action on Health Inequalities**

- Cluster 1: *Relatively positive and active response to health inequalities.*

- At least one national response to HIs or comprehensive regional HI policy responses.

- Cluster 2: *Variable response to health inequalities.*

- No explicit national policy on HIs, but at least one explicit regional response or a number of other policies with some focus on health inequalities.

- Cluster 3: *Relatively undeveloped response to health inequalities.*

- No focused national or regional responses to health inequalities, no explicit health inequality reduction targets (though there may be targeted actions on the social determinants of health).



[giuseppe.costa@epi.piemonte.it](mailto:giuseppe.costa@epi.piemonte.it)



Disuguaglianze di salute

Ridurre le disuguaglianze con azioni  
di contrasto sui determinanti sociali

<http://www.disuguaglianzedisalute.it/>