

# Some thoughts on *populations* and mental health

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**[take a population approach to mental health]**

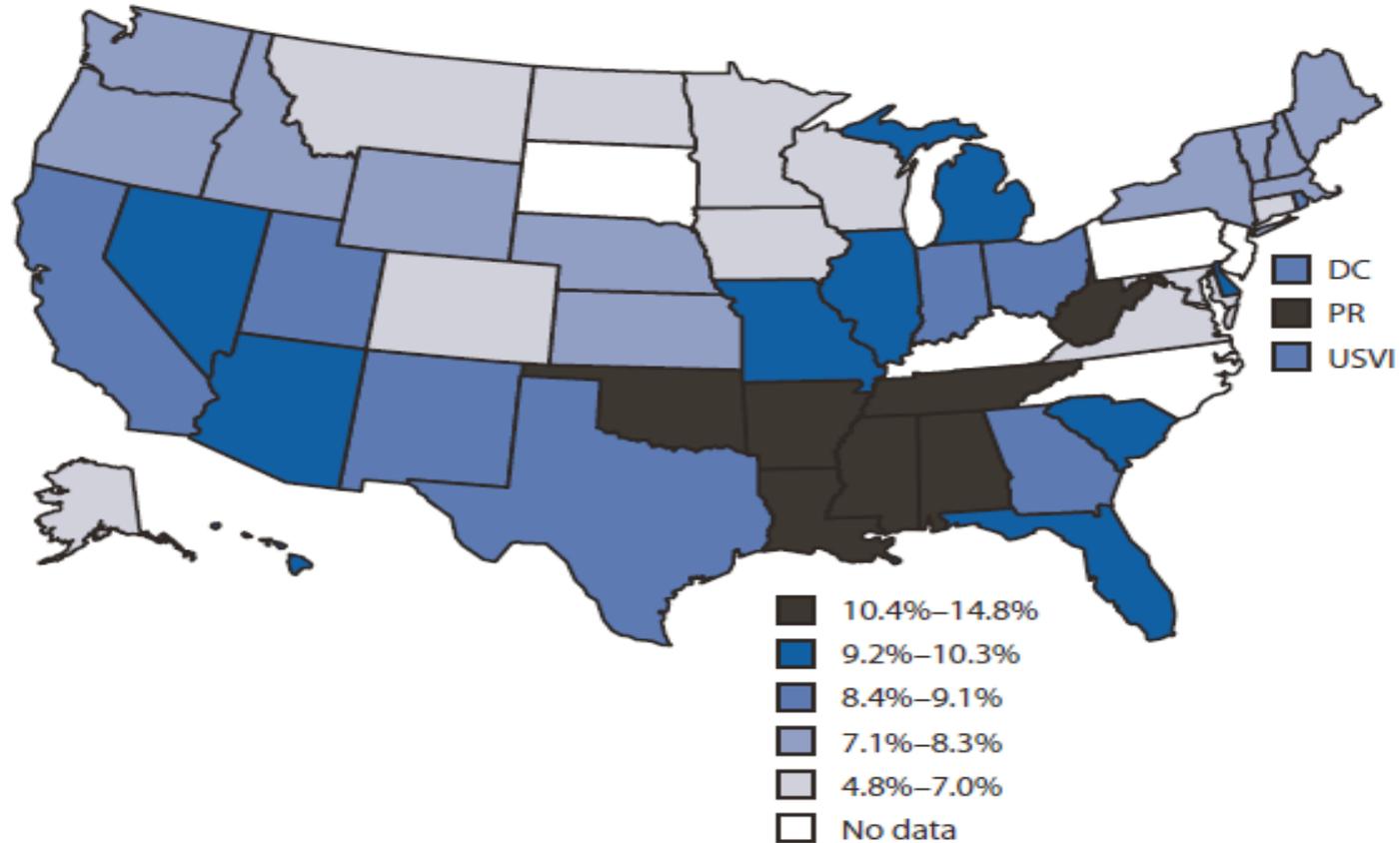
- 1. Should we [ ] ?**
- 2. Can we afford not to [ ] ?**
- 3. So, can we, [ ] ?**

**[take a population approach to mental health]**

- 1. Should we [ ] ?**
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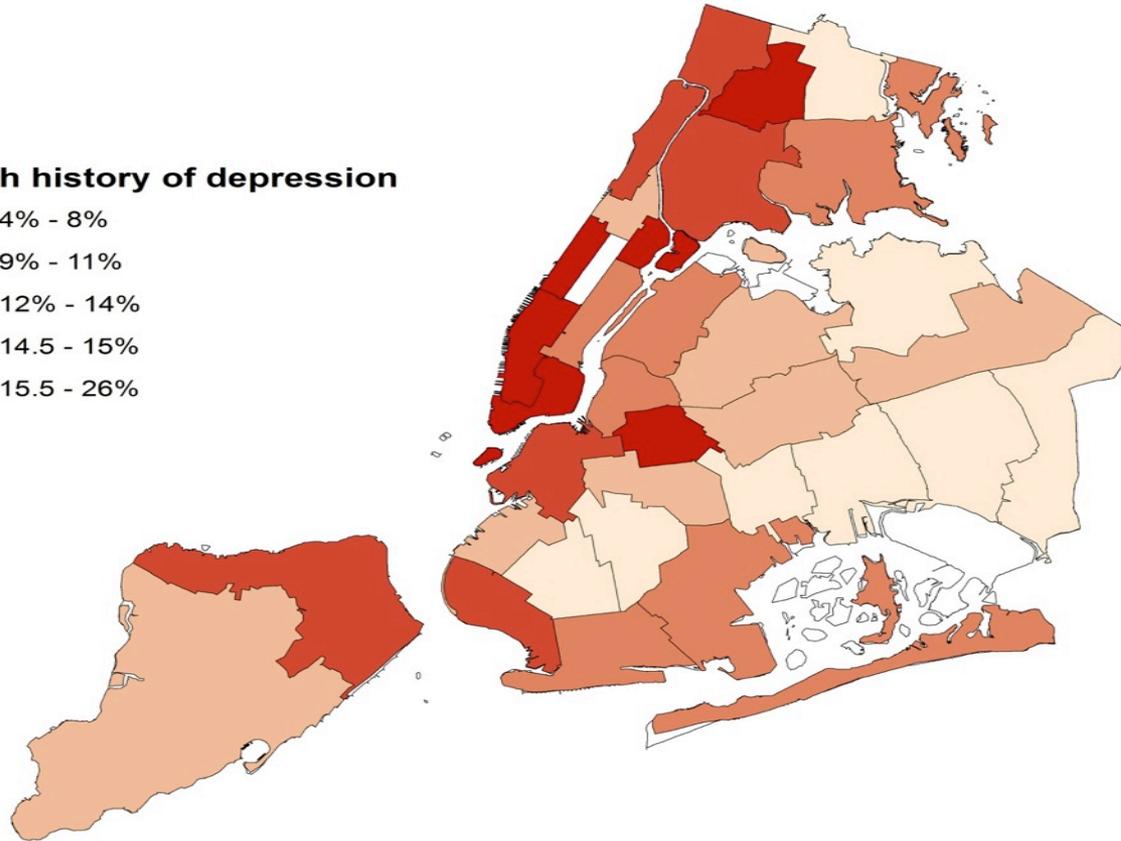
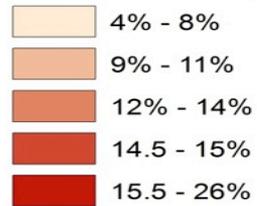
## **a. Intuition**

# Depression in the U.S., 2008



# Depression, NYC, 2010

## % With history of depression



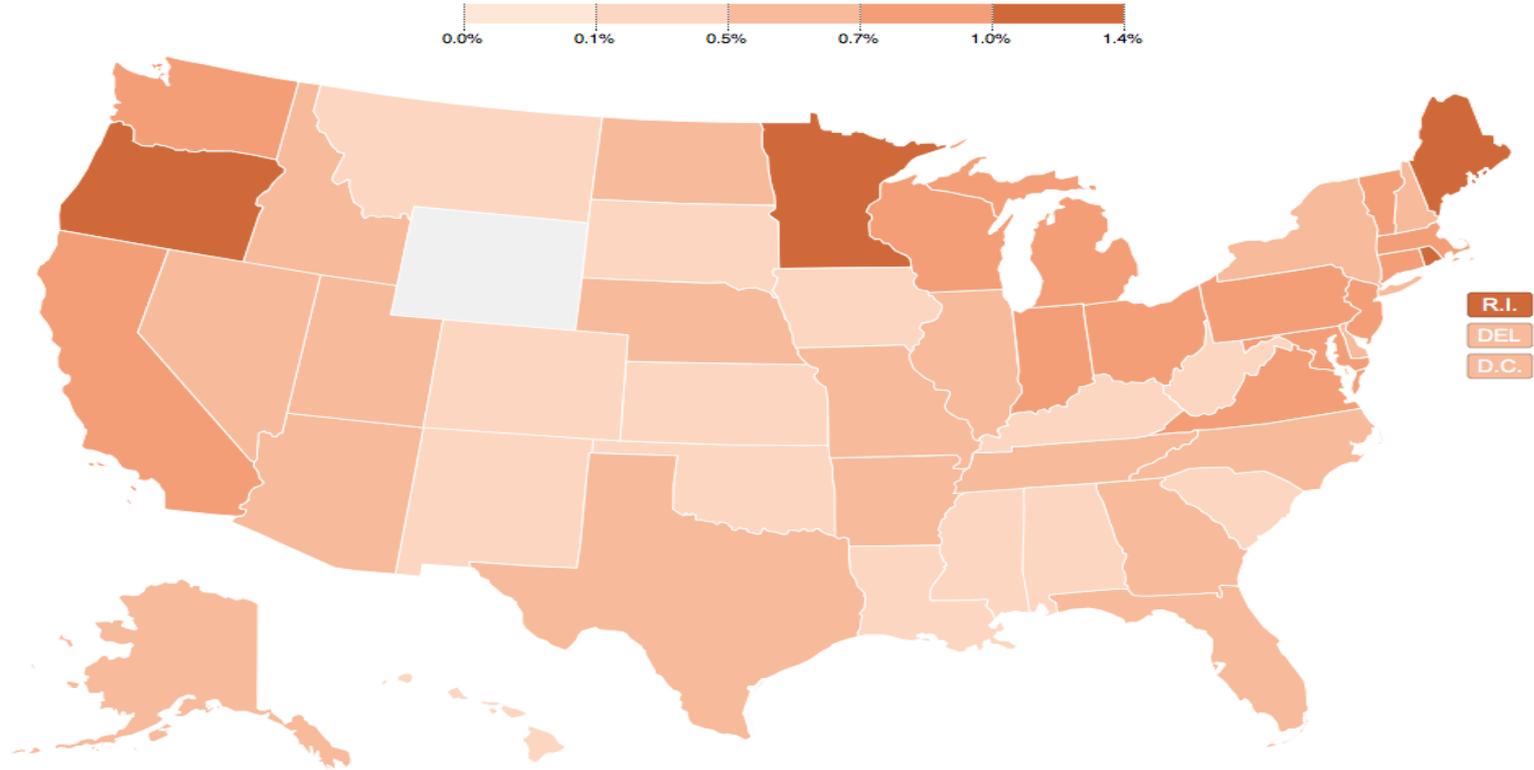
20

0

20

Miles

# Autism in the United States, 2010



Published: Dec. 9, 2011

Credits: Interactivity: Anthony Pesce | Research: Sandra Poindexter, Doug Smith and Alan Zarembo

**b. Values**

**Ask yourself...would you prefer**

**To have access to effective treatment for your  
schizophrenia**

**Ask yourself...would you prefer**

**To have access to effective treatment for your  
schizophrenia**

**or**

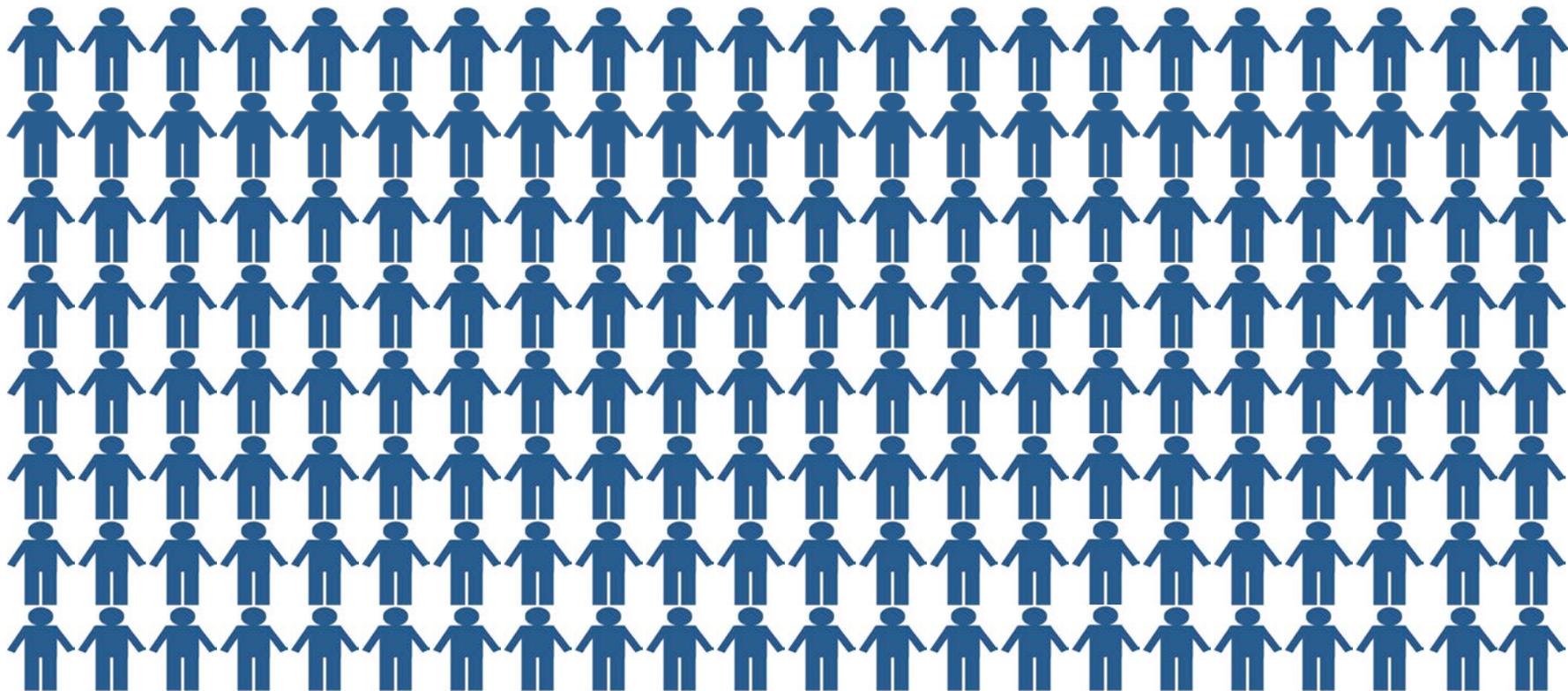
**Never to have schizophrenia at all**

“

**One of [our] most difficult challenges is to ensure that the urgent does not crowd out the important. In health the challenge is especially difficult because urgent matters can be so riveting.** ”

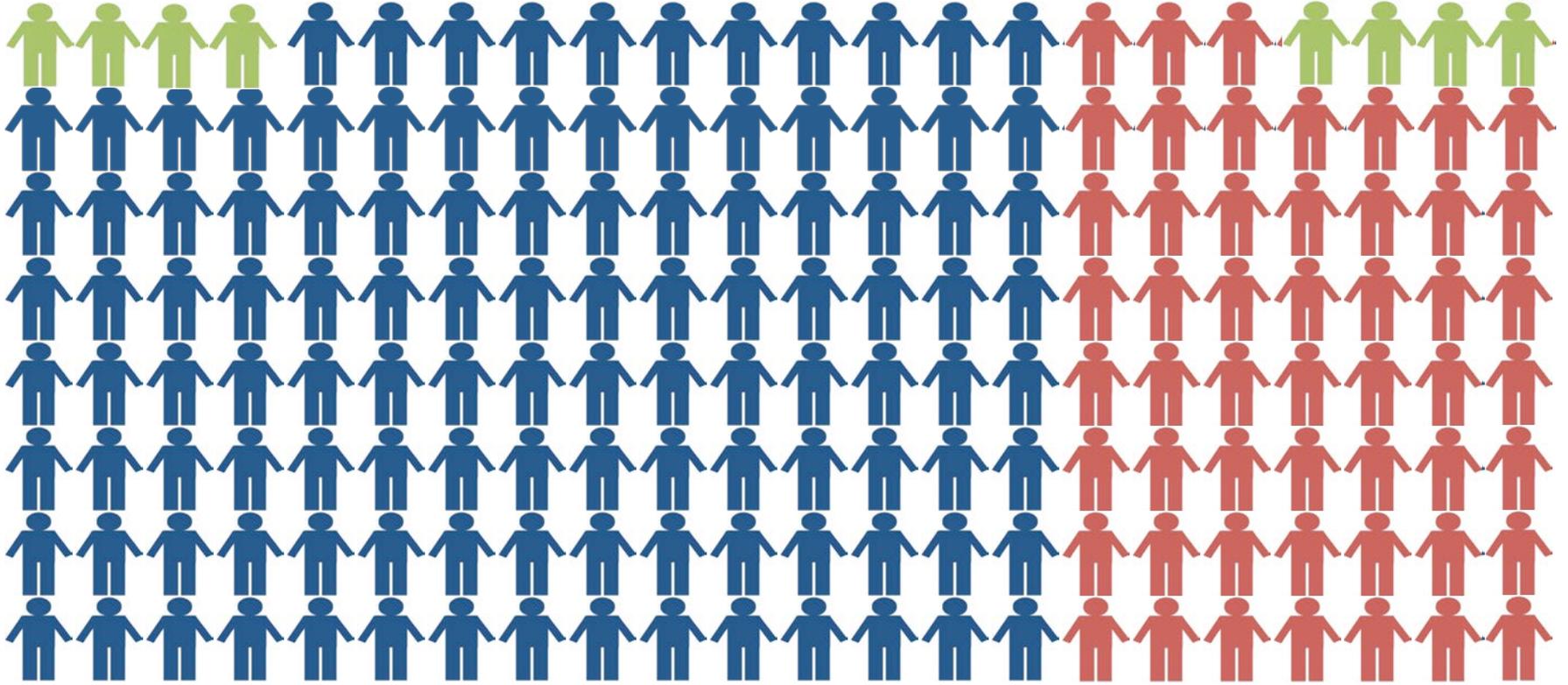
**c. A formalism**

# Population





# Disorder



**Should we take a population approach to mental health?**

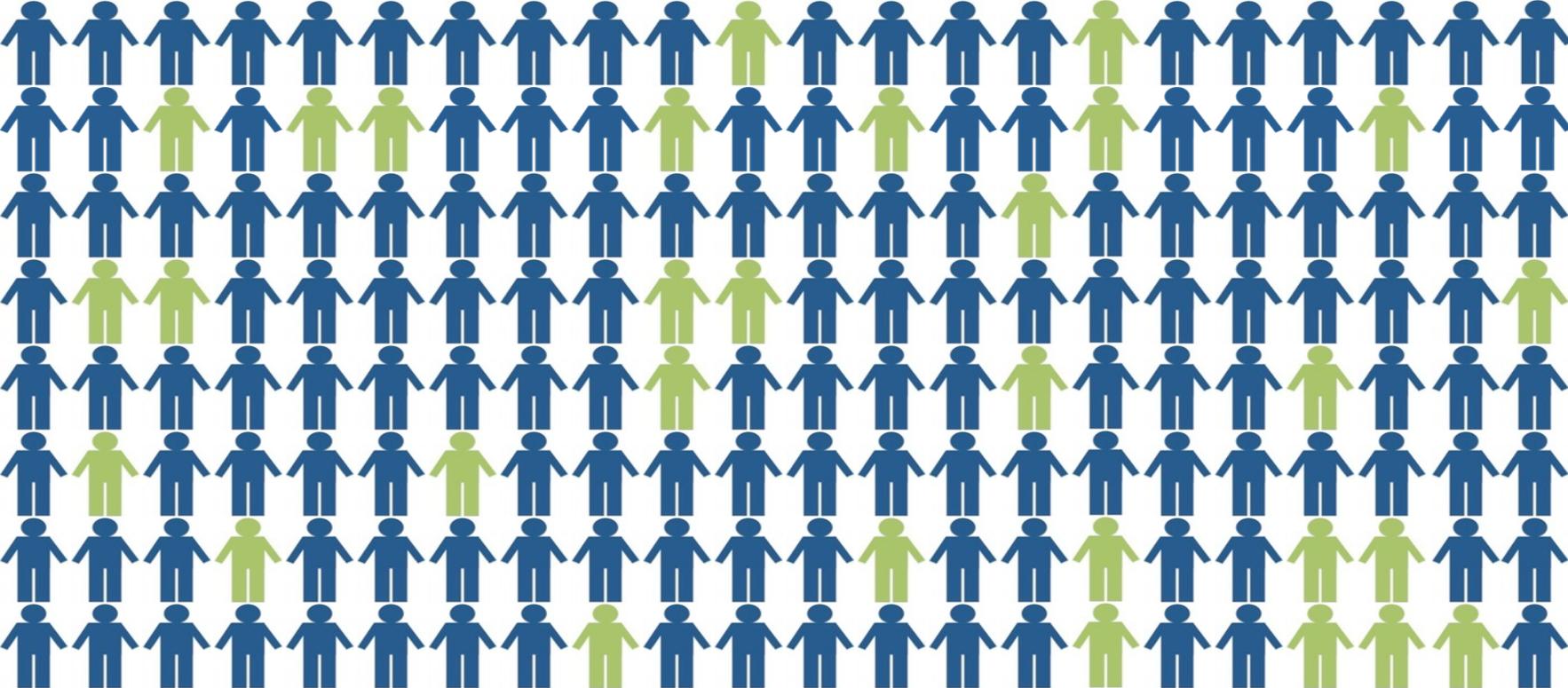
**Yes**

**[take a population approach to mental health]**

1. Should we [ ] ?
2. **Can we afford not to [ ] ?**
3. So, can we, [ ] ?

**Our curative efforts are, always, fixing only one very small bit of a much larger challenge**

# Some people are 'exposed'

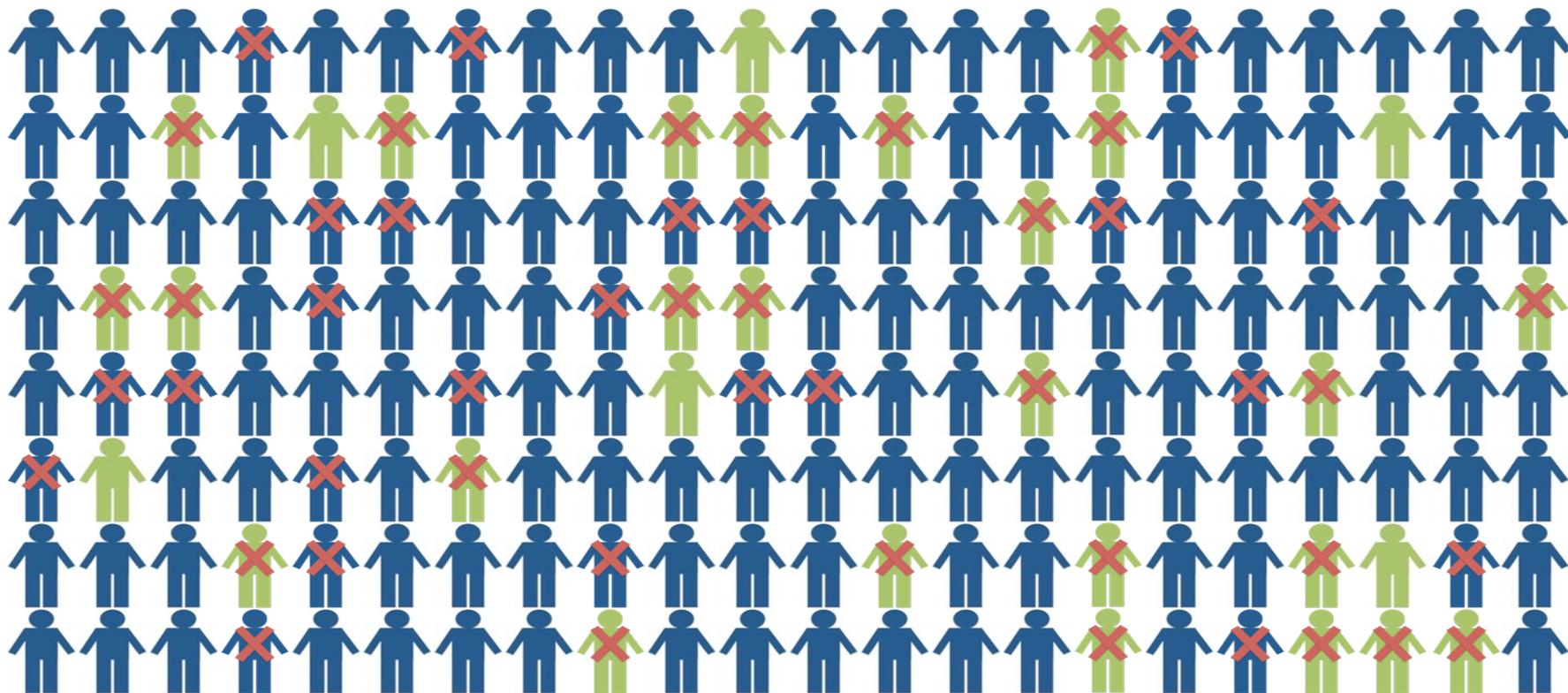


Unexposed



Exposed

# Both exposed and unexposed have disease

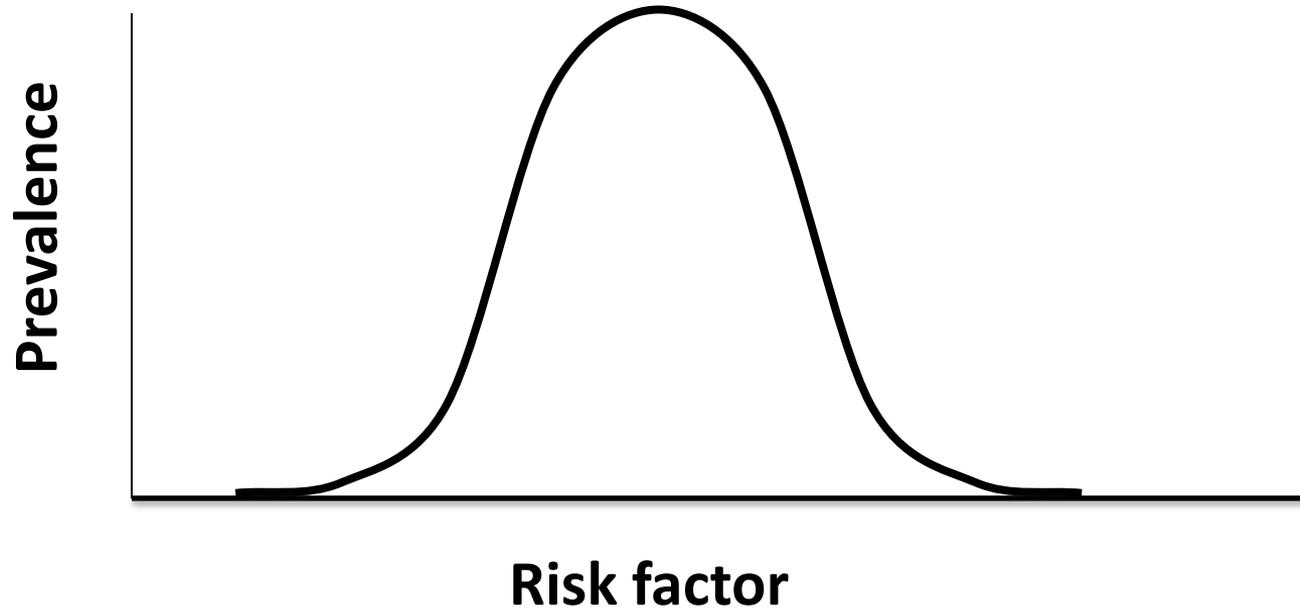


 Unexposed

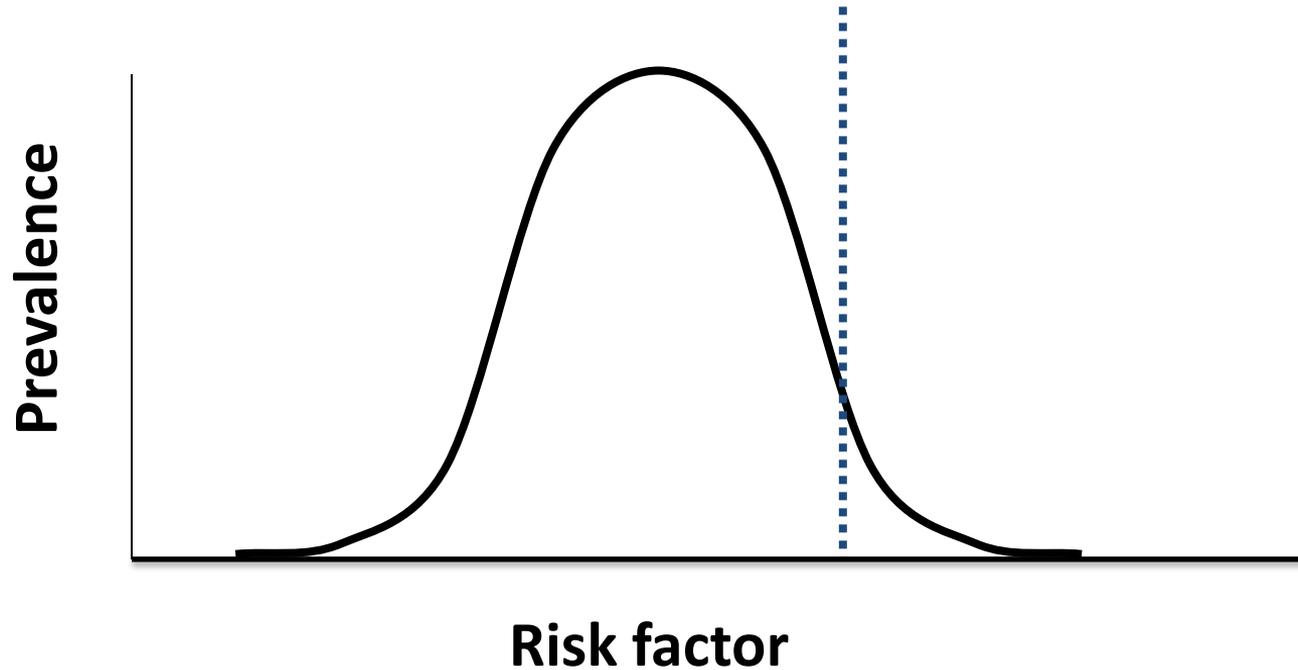
 Exposed

 Unexposed  
with disease

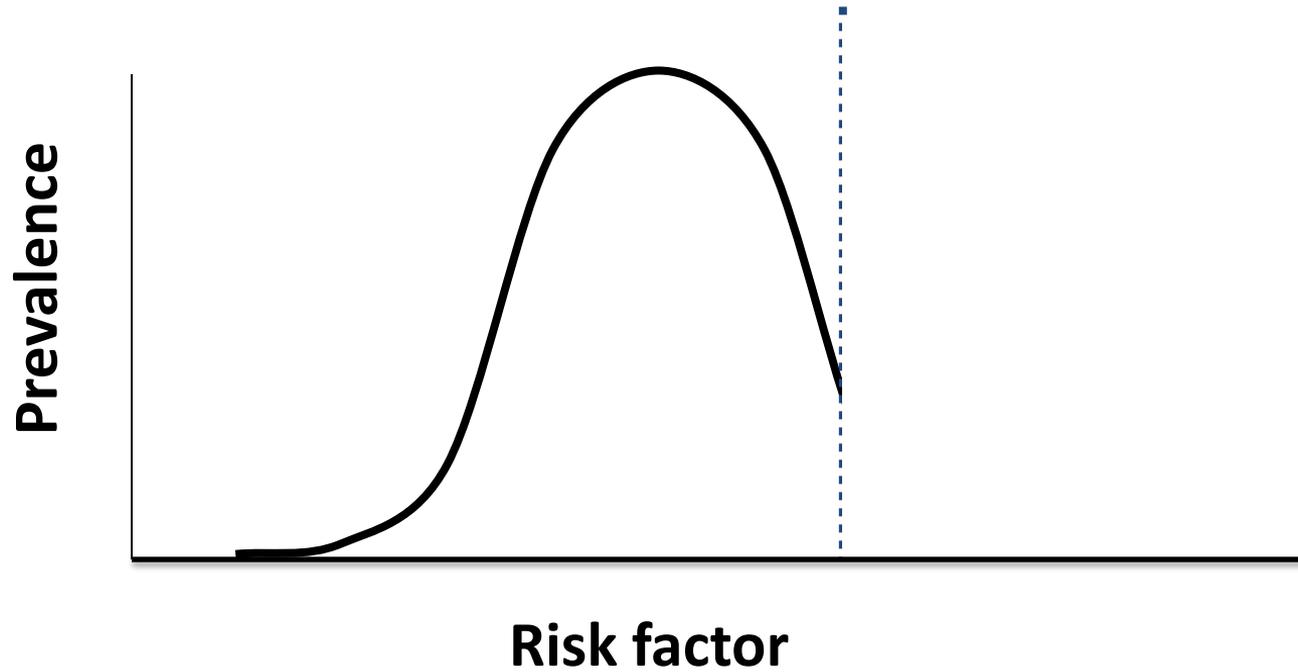
 Exposed  
with disease



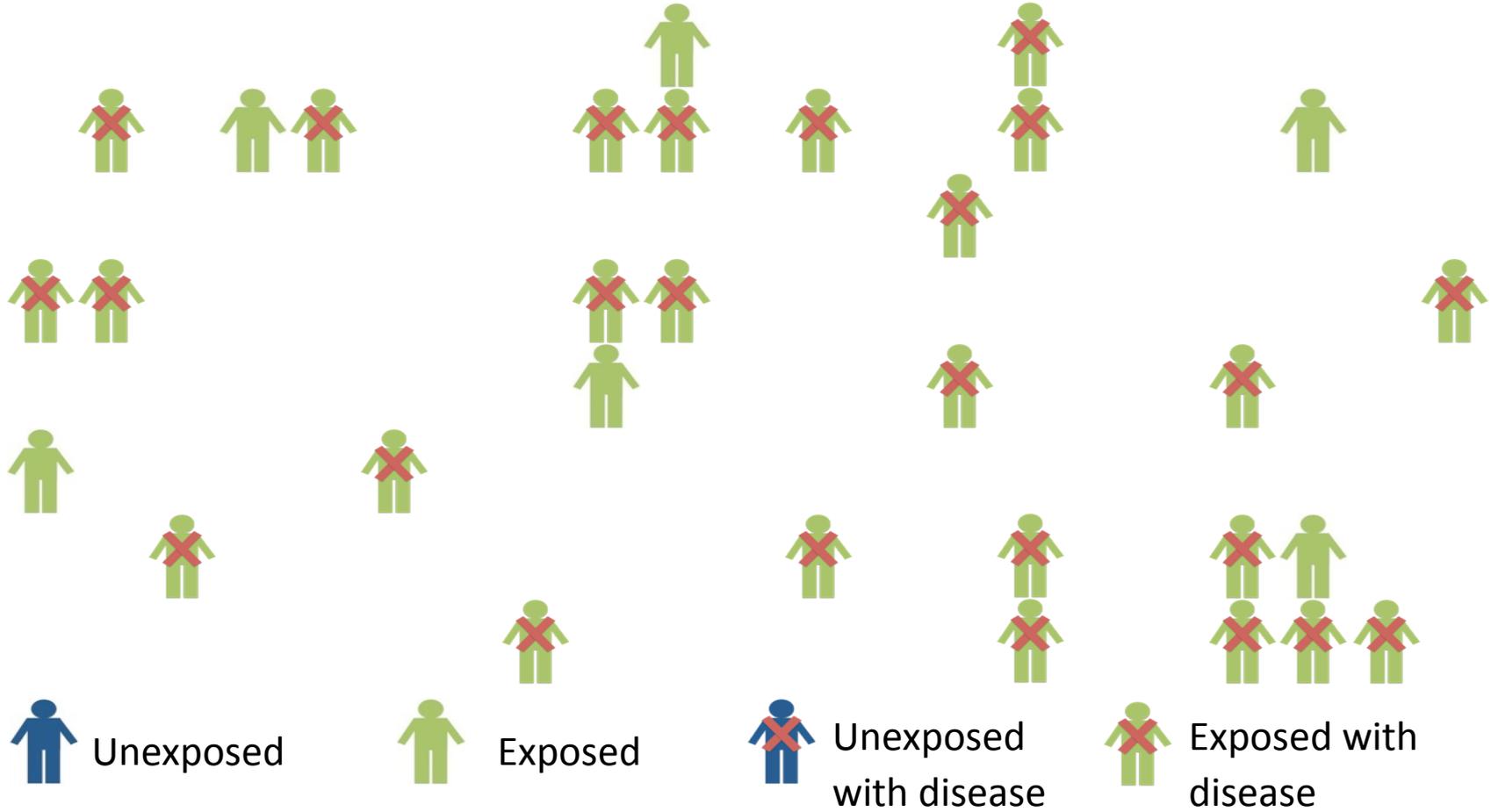
# Identify those who are high risk



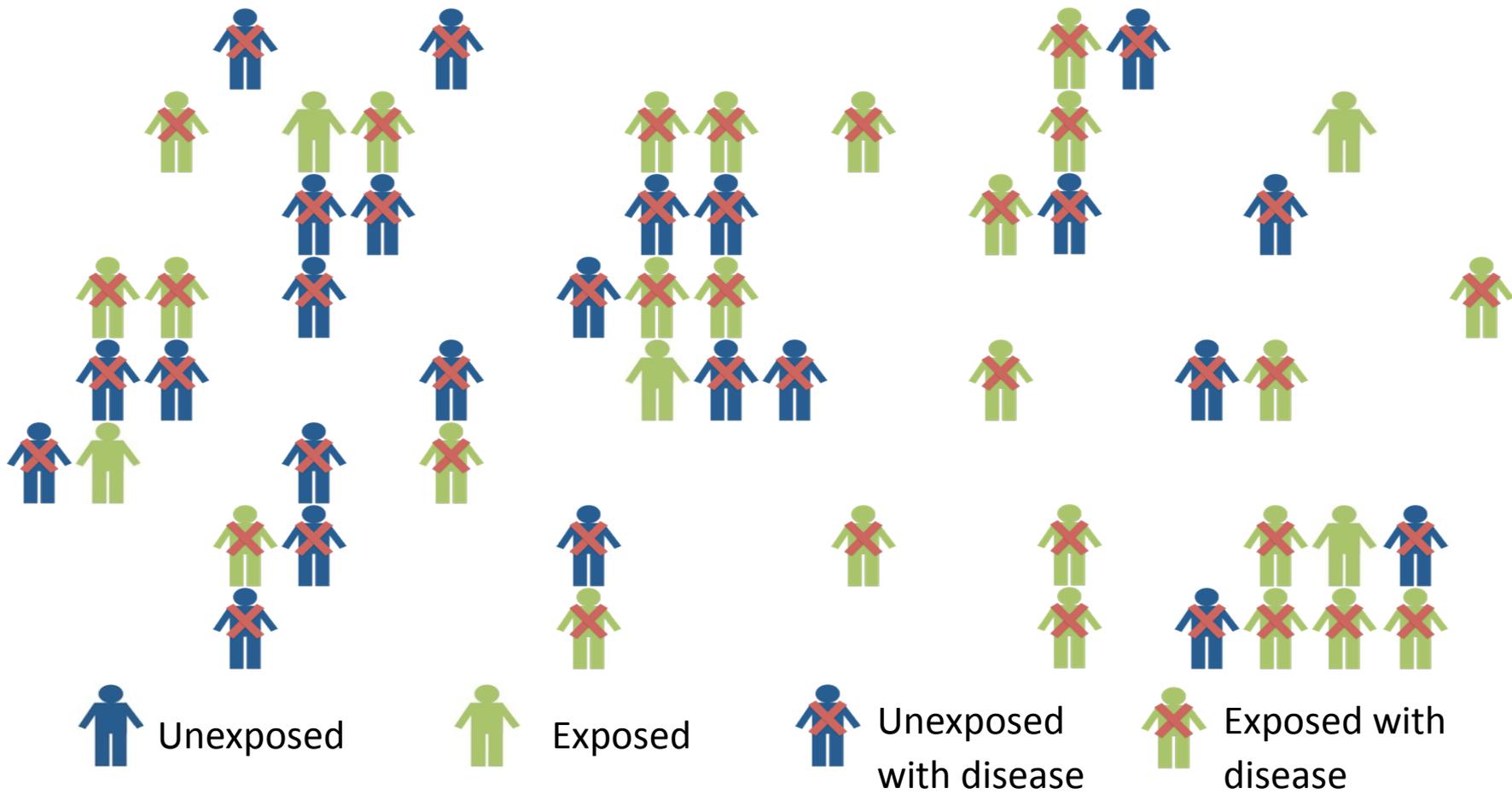
# Then decrease their risk



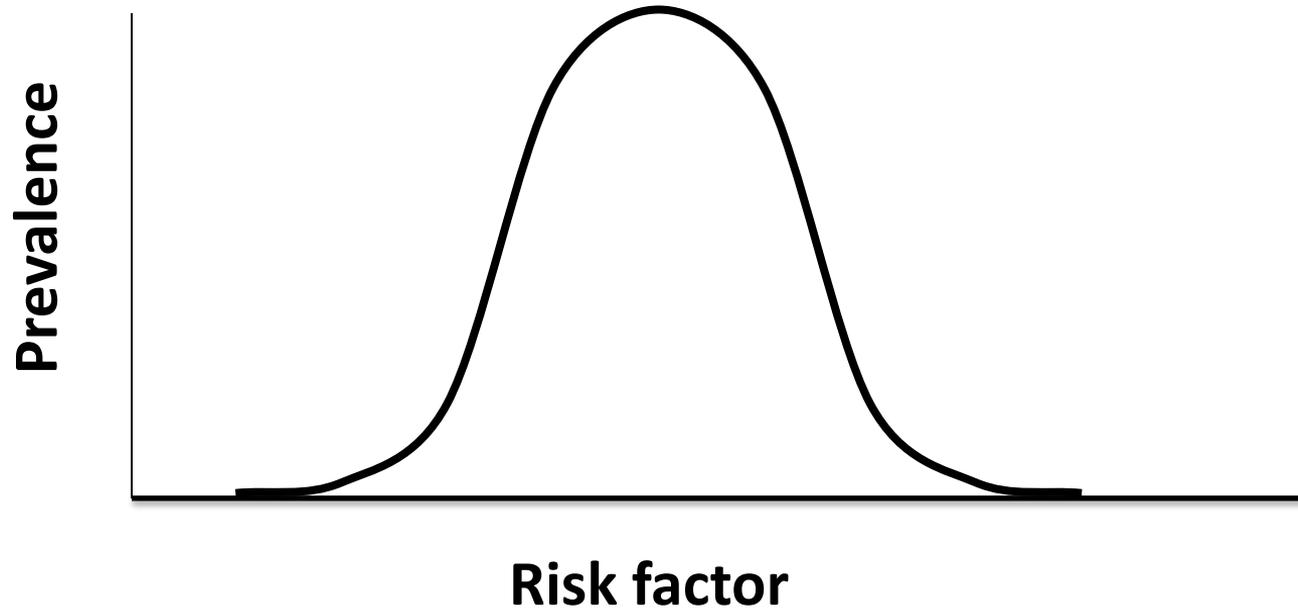
# The medical strategy sees this



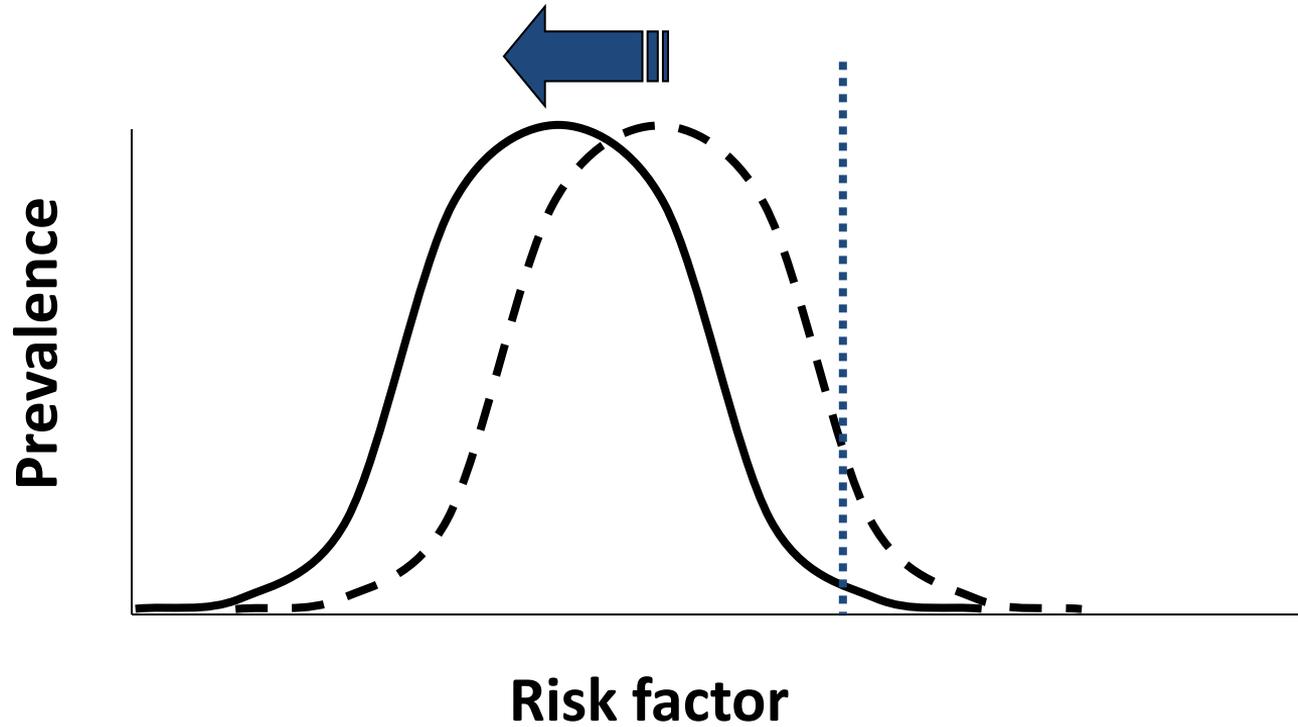
# But misses all of this



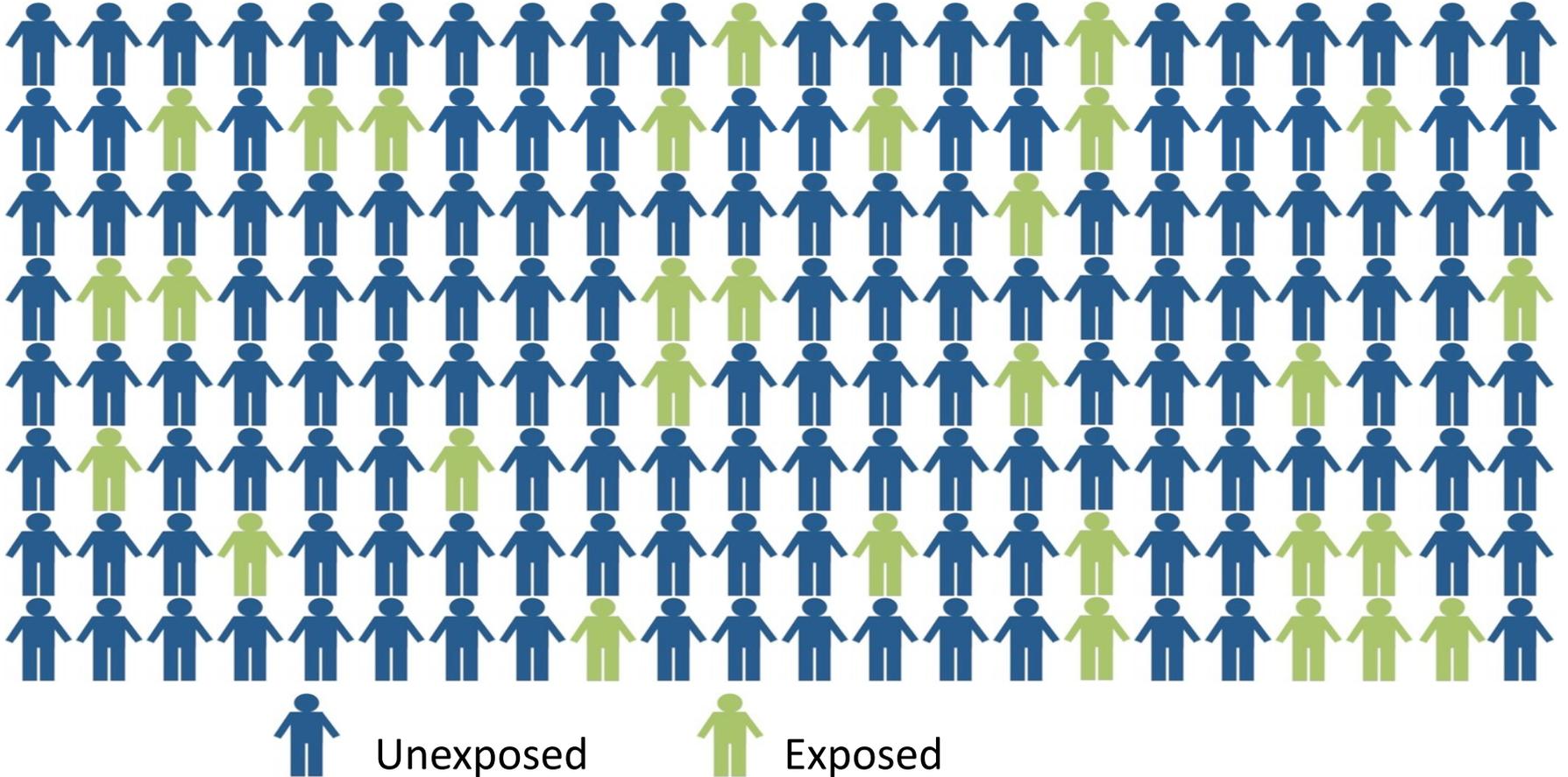
# The population health strategy



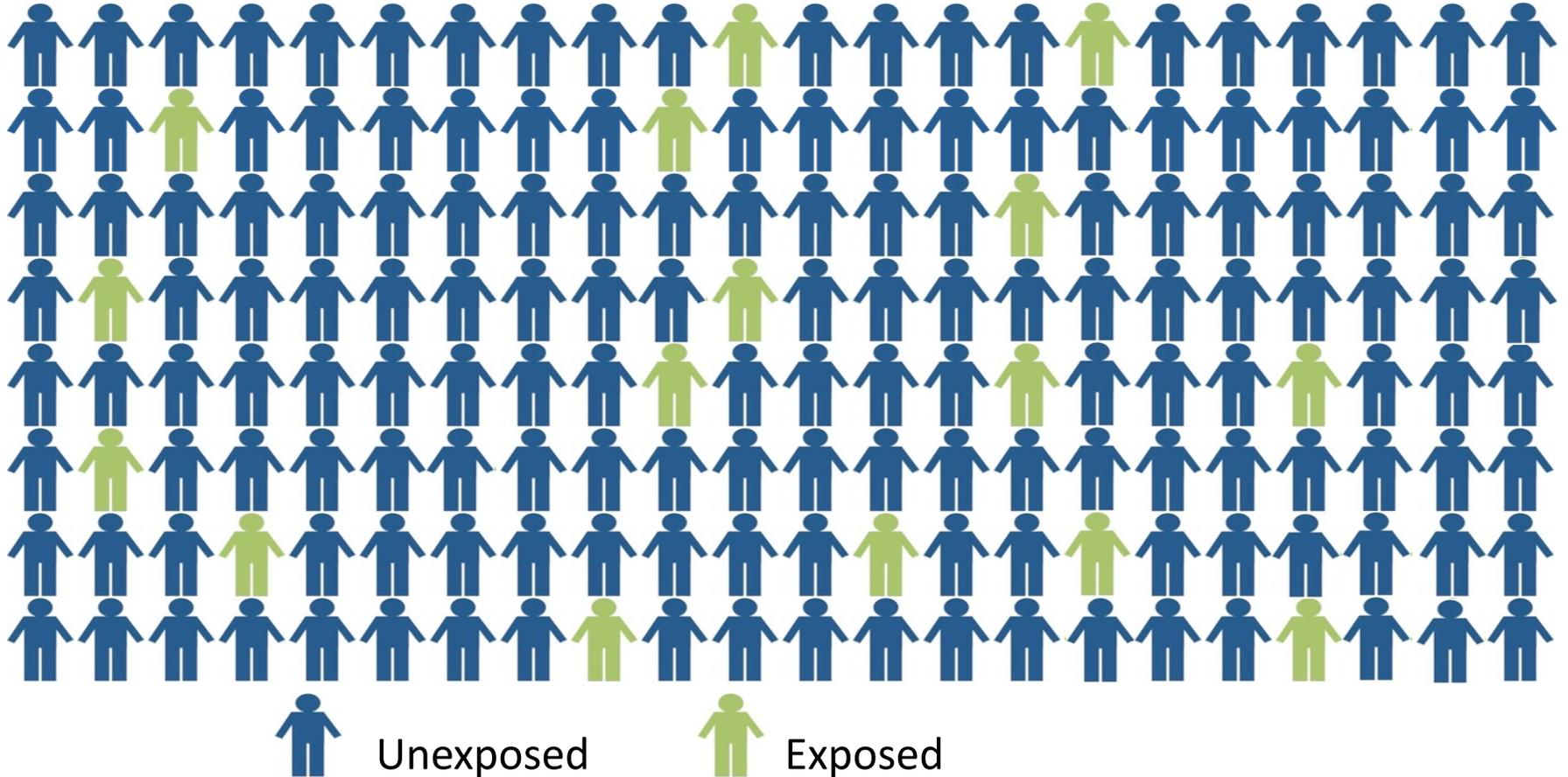
# Shifts the entire risk distribution



# The population health strategy



# The population health strategy





**Therefore, factors in the population are *inevitably* driving the prevalence of mental health**

**Can we afford *not to try* to take a population approach to mental health?**

**No**

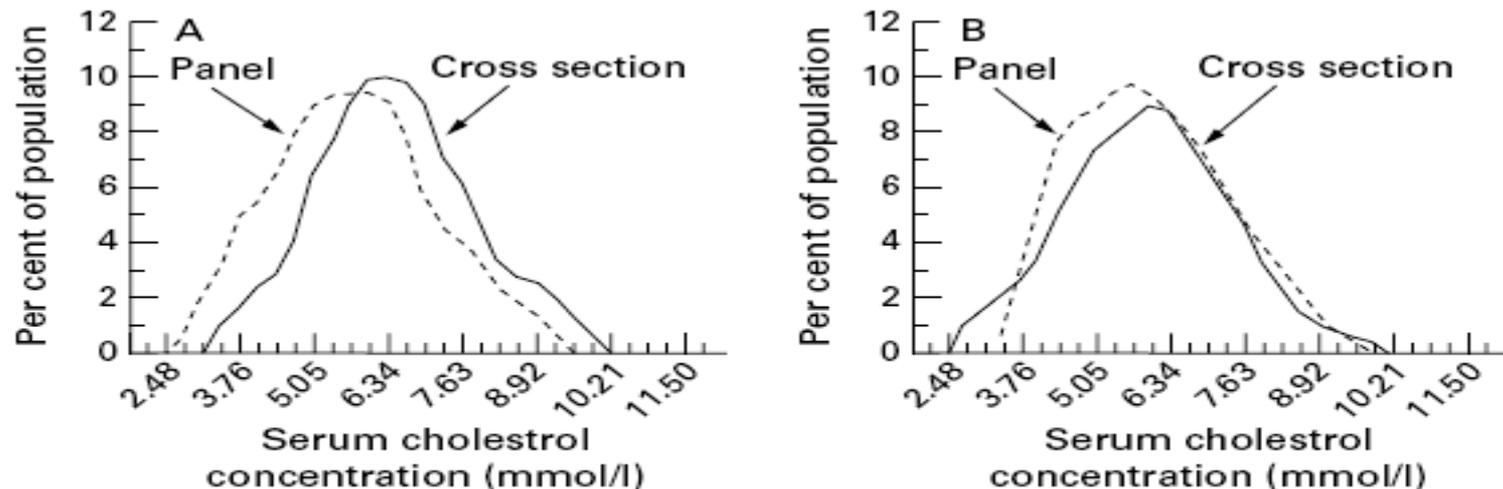
**[take a population approach to mental health]**

1. Should we [ ] ?
2. Can we afford not to [ ] ?
3. **So, can we, [ ] ?**

## **A story**

- **A 47-year old man is felled by an inexplicable illness**
- **He cannot seem to get moving any more**
- **His doctors suspect a cause, but doubt it, more than 60% of people in the country share the same cause**
- **The doctors recommend rest, and hope for the best**

# Preventing cardiovascular disease



*Figure 4 Distributions in plasma cholesterol, comparing panel with contemporaneous cross sections. Mean  $\bar{x}$ =0 for 1986 MONICA= 6.34 mmol/l. SD=1.29. (A) Comparison between panel (dotted line) and cross section (continuous line) after two years. (B) Comparison between panel (dotted line) and cross section (continuous line) after five years.*



“

**It is no longer sufficient to expect that reforms in the medical care delivery system alone will improve the public's health. Large proportions of the US disease burden are preventable. ”**

**So, *can we*, take a population approach to mental health?**

**Yes**

“  
**Public health is what we, as a society, do collectively  
to assure the conditions for people to be healthy**”

# prevention |pri'venCHən|

**noun**

**the action of stopping something from happening or arising**

## **PHRASES**

**an ounce of prevention is worth a pound of cure proverb it's easier to stop something from happening in the first place than to repair the damage after it has happened.**

# Acknowledgements

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MAILMAN SCHOOL  
OF PUBLIC HEALTH