

# How can public health agency support the integration of health in climate policies?

09/10/2020

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## Direct impacts

- Heat waves
- Floods, storms, hurricanes
- Forest fires
- ...

## Indirect impacts

- Air, water; soil pollution
- Ecosystem changes
- Water quality and accessibility
- Infectious diseases
- Mental health
- ...

## Impacts on the socio-economic determinants of health

- Migration, war
- Poverty
- Destruction of infrastructures
- ...

- Earth is facing environmental changes of unprecedented speed, magnitude and extent
- Public health is already impacted, and the severity of future impacts will depend on adaptation and mitigation policies
- Yet, health is poorly taken into account in those policies
- Delay in acting is a lost opportunity

“Climate change will shape the health of nations for centuries to come”

N. Watts, Lancet 2018

# PRESENT CHALLENGES

- **The health risks and impacts of climate change in countries are evolving rapidly**

- changes in geographical patterns, emerging threats
- cascading risks

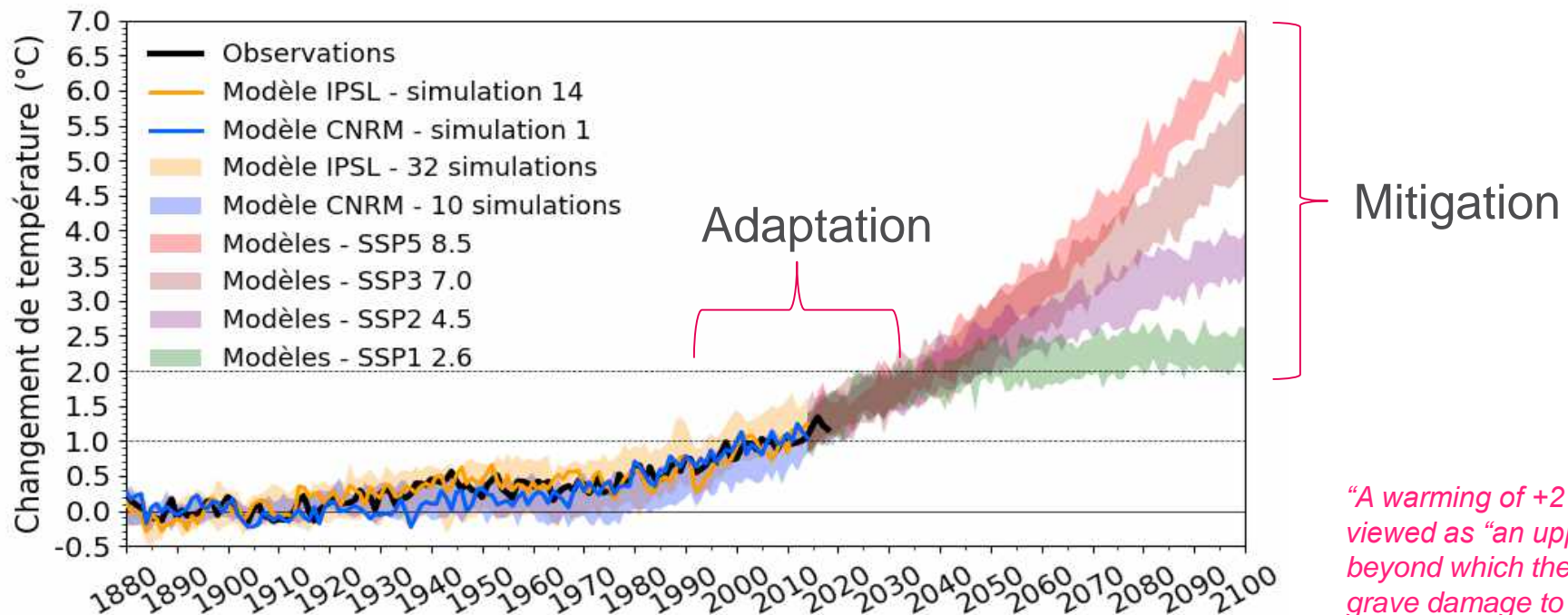


- **Mitigation policies with potentially large health co-benefits are experimented locally**

- need to support those initiatives to maximise the public health benefits and to reduce health inequities



# THE COMPLEMENTARITY OF ADAPTATION AND MITIGATION



*“A warming of +2°C is viewed as “an upper limit beyond which the risks of grave damage to ecosystems, and of non-linear responses, are expected to increase rapidly” (Rijsberman, F. R.; Swart, R., 1990)*

Mean global temperature (compared to 1880-1919), according to various models and socio-economic scenarios (Météo-France)

# CLIMATE CHANGE AND HEALTH AT SANTÉ PUBLIQUE FRANCE



- **Climate and health project since 2004**

- Heat warning system since 2004
- Review of the health risks that were likely to be modified by climate change before 2030
- Ad hoc epi studies to support adaptation
- Advocacy and capacity building
- Conceptual framing to develop health indicators of climate change

# NEED FOR A CONCEPTUAL FRAMEWORK TO DEVELOP HEALTH INDICATORS



- **Recommandation of the « Our common future under climate change » conference 2015**
  - “Health researchers and others must develop appropriate health indicators that may be integrated into the follow-up and evaluation of adaptation and mitigation plans”
- **2<sup>nd</sup> French adaptation plan (2017-2022)**
  - to reinforce the integration of the health impacts of climate change at the regional scale
  - to develop health indicators that would document and support local policies
- **World Meteorological Organisation census of health indicators in climate change strategies 2017**
  - great variety of indicators
  - lack of transparency on the reason why they were chosen
  - relevance to support policies?

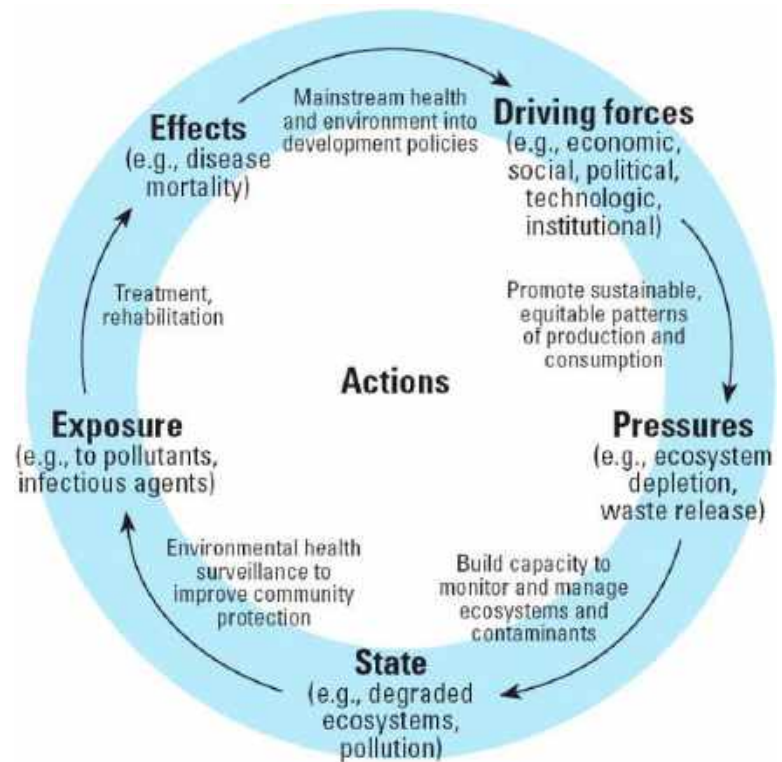
# WHY A FRAMEWORK ?



- **An indicator must synthesize a complex knowledge, while being accessible to a wide range of audiences, most of them not familiar with public health**
- **It pre-supposes *a minimum* of construction and structuration of knowledge and data**
- **It makes sense in a given context, with regard to a given objective**
  - Local construction of objective-oriented indicators would be more efficient than an *a priori* list to engage stakeholders and promote local action
- **But we also need to increase comparability of indicators**
  - A shared conceptual framework would ensure consistency and creativity

# WHAT IS AN HEALTH INDICATOR?

- For a given health issue, consider the possible climate influence based on a Dpssea approach
  - direct/indirect influence of climate change ?
  - influences of adaptation and mitigation ?
  - assess the degree of confidence based on the current knowledge
- An indicator gives a summarized quantitative information on a health issue that may directly or indirectly be influenced by present or future climate change
  - it is not necessary to quantify the fraction of the indicator attributable to climate change
  - it is not always an health data





## MAIN STEPS DISCUSSED IN THE FRAMEWORK

1

- Select an health issue of interest

2

- State your targets

3

- Identify a set of possible indicators

4

- Check their qualities

5

- Produce and disseminate the indicators

6

- Evaluate

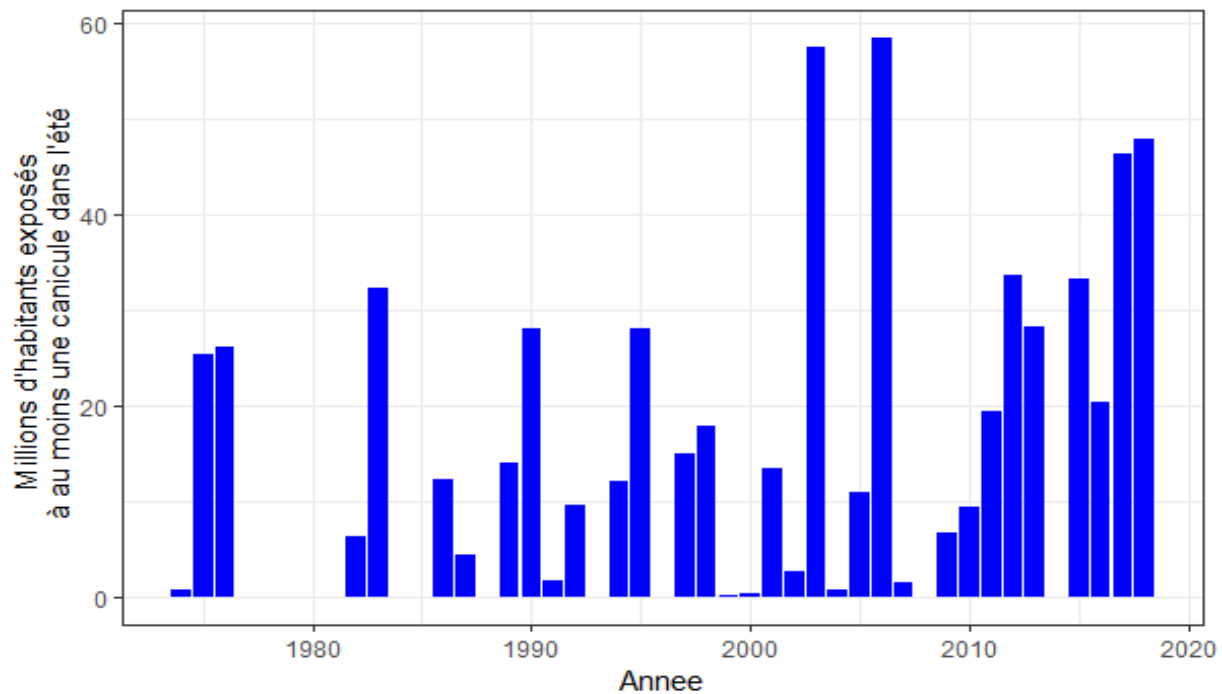
# KEY QUESTIONS

- Which dimension do you want to capture in the indicator?
- Geographical and temporal scale?
- Stratification by sub-populations?
- Data availability and fitness for purpose ?
- Scientific and pedagogic qualities?

Dimension	Type of data
Danger	Environmental data
Exposure	Population / Environmental data
Vulnerability	Risk factors / Exposure
Impact	Health outcome
Intervention	Actions to reduce the exposure, the vulnerability or the impacts

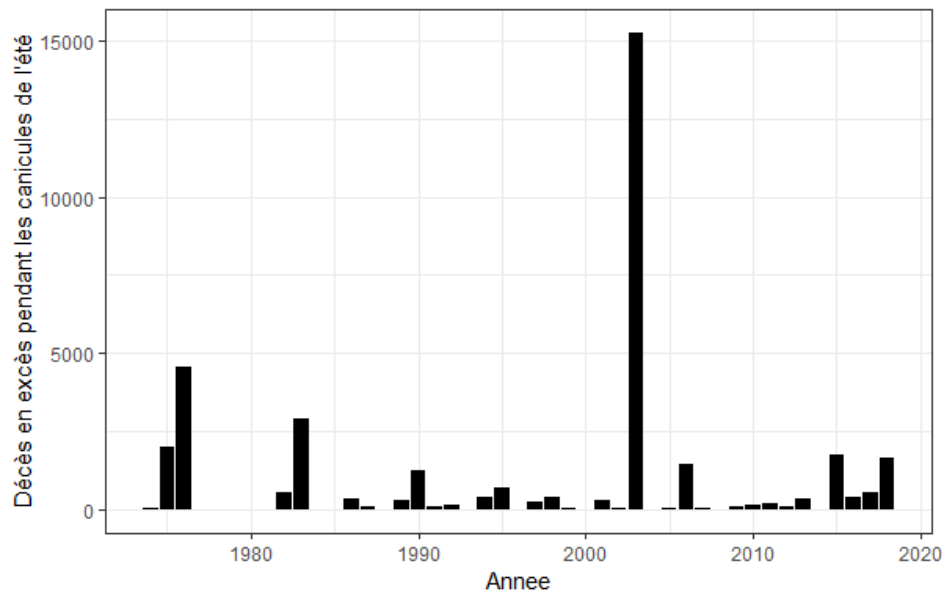
# EXAMPLE HEAT WAVES - EXPOSURE

Millions of people exposed to at least one heat wave during the summer in France since 1970



# EXAMPLE HEAT WAVES - IMPACT

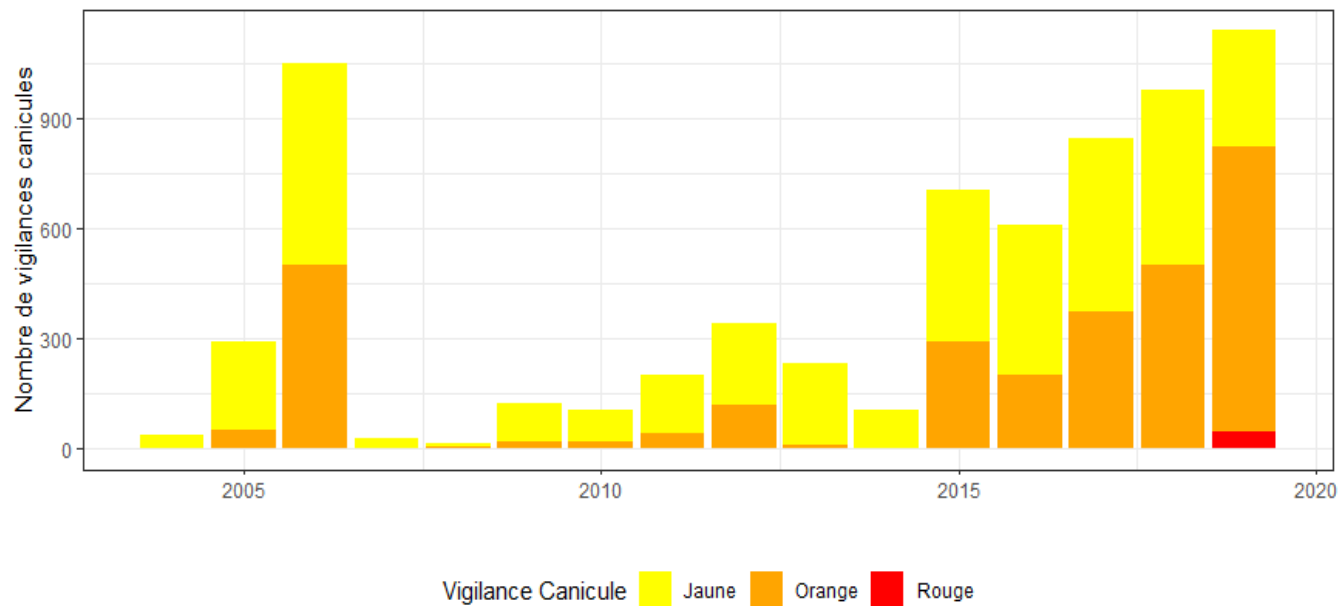
Excess mortality during heat waves in France since 1970



<http://geodes.santepubliquefrance.fr>

# EXAMPLE HEAT WAVES - INTERVENTION

Number heat warnings since 2004 (one warning = one département one day)



# PERSPECTIVES ON INDICATORS



- **What is the role of a national public health agency?**
  - to improve and disseminate the framework
  - to monitor its use
  - to mutualise knowledge and data production
  - to facilitate consistency accross scales
  - to communicate the indicators
  
- **How to interact with regional agencies and stakeholders?**
  - top-down: creating a basic set of common indicators at the national/ international level, to be declined locally
  - bottom-up: get inspiration from local indicators that could be reproduced elsewhere

# BEYOND INDICATORS



- **How IANPHI can inspire leadership on climate change, adaptation, mitigation and health?**
  - advocacy
  - capacity building
  - networking and sharing of good practices