



# Designing a plan to manage a drought risk in public health

## EUROPA TEAM

- Coral Salvador
- David Espin
- Eglantina Dervishi
- Sanja Vojvodić

# Galicia context

- North-west part of Spain
- Drought and wildfiers prone area
- Mostly elderly population
- Rural population concentrated inland and sparse; coastline has more population density

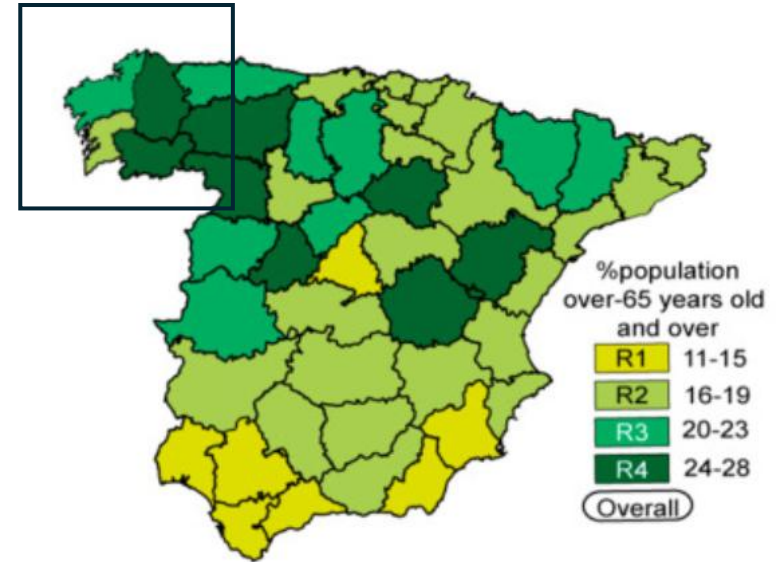
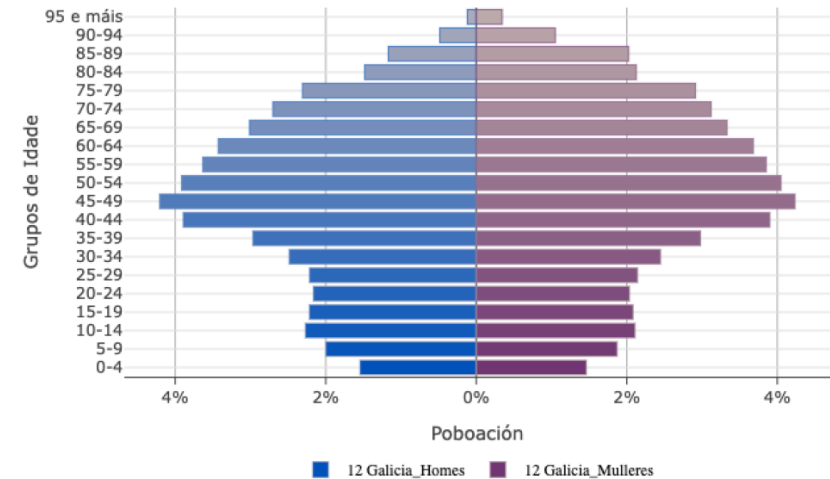
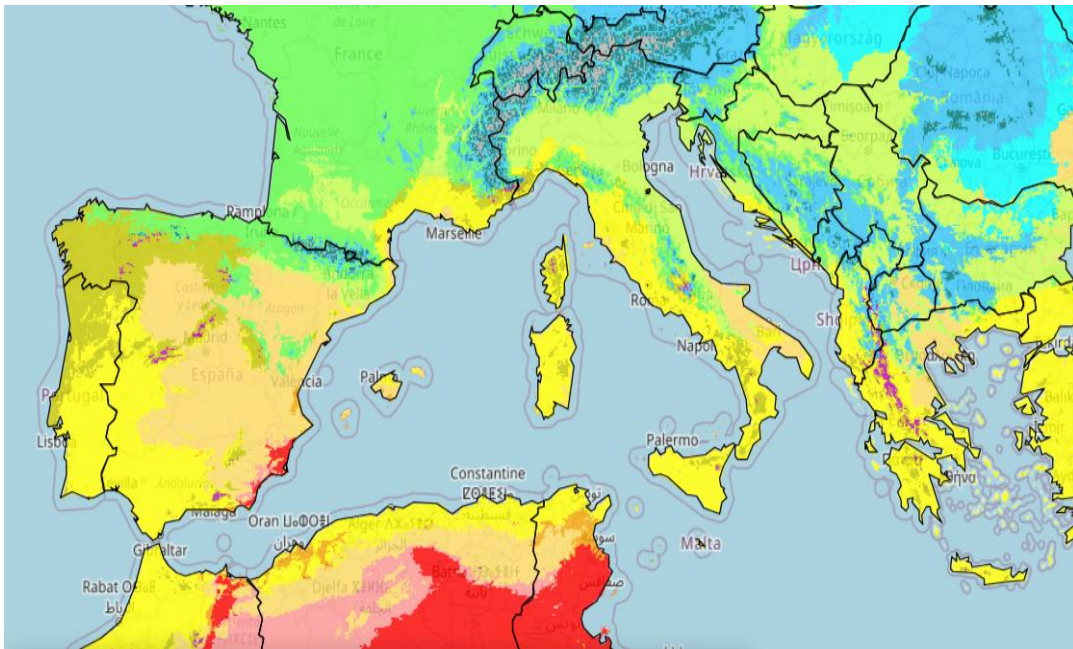


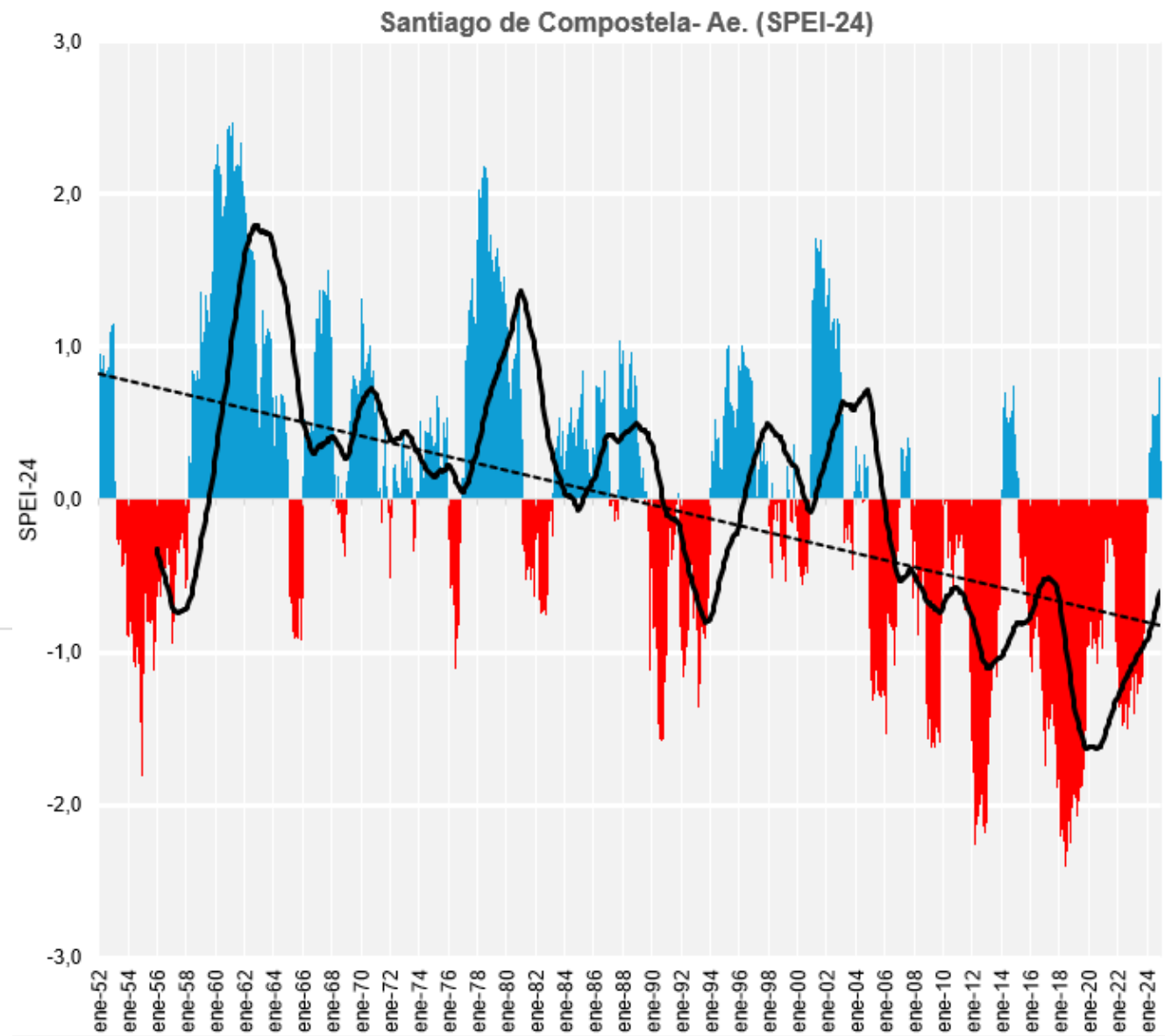
Figure 2 - Population pyramid of Galicia. 2022 <sup>3</sup>



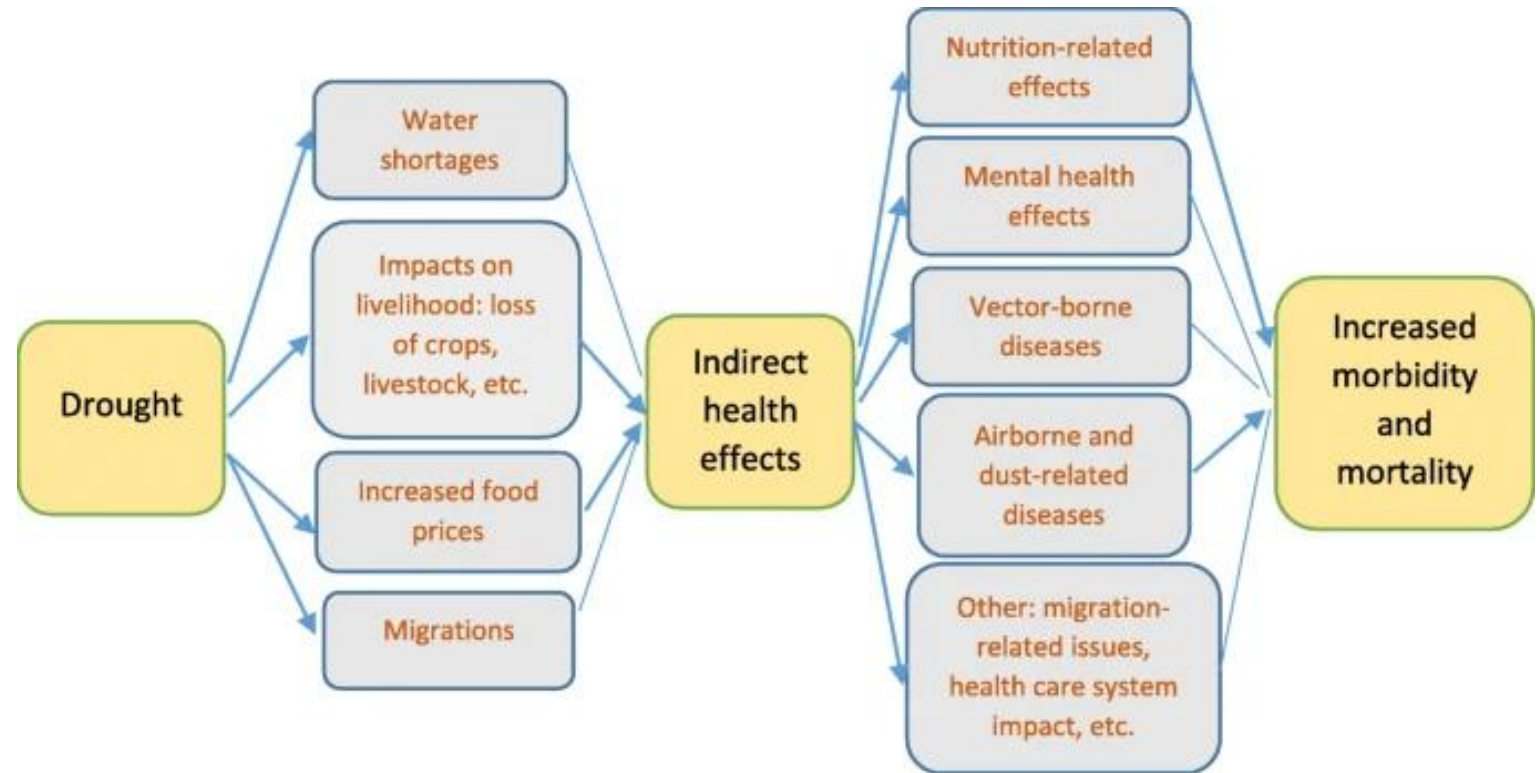




## DROUGHT EXPOSURE SPEI (1952-2024)



# Impact of drought on health



# Principles that guide action planing

based on WHO  
heat-health  
action plan

Inclusive

Multidisciplinary

Effectively  
communicated

M and E

long-term  
strategic  
approach

LEAD  
AUTHORITY

**Regional and  
National  
Ministry of  
Health**

## **Intersectoral Coordination**

- Regional Meteorological Organization (SPEI)
- Ministry for Ecological Transition and the Demographic Challenge
- Regional water authorities
- Local government
- Agricultural sector
- Environmental agencies
- Civil protection
- Health and Social services sectors (hospitals, retirement homes, schools...)
- Voluntary groups (e.g. Red Cross, NGOs...)

STAGE 1: Monitoring and forecasting of extreme weather events: when indicators are exceeded in the health surveillance systems – early warning system is integrated and activated (Regional Meteorological Organization (SPEI); Ministry for Ecological Transition and the Demographic Challenge)



STAGE 2: Drought impacts: different levels of drought severity (normal, pre-alert, alert, emergency) predict different levels of vulnerability patterns and risks (epidemiological services and researchers within the lead authority)



STAGE 3: Actions to minimize impact on human and non-human health (short and long term measures coordinated by health and civil services)



STAGE 4: Monitor and Evaluation (real-time data)

# DROUGHT INFORMATION PLAN

WHO? (Lead Body, Local Government, Health, Social, Transport Sector, Waste management, Education sectors, Town Council, etc.)

WHAT? (risks information, advices, general recommendation)

WHOM? (General population with particular attention paid to vulnerable groups such as people with underlying health condition, elderly, children, migrant and occupational workers, homeless people...)

WHEN and HOW? ASAP through multilevel channels



# COMMUNICATION PLAN

## INFORMATION DISSEMINATION

Needs to be accessible, inclusive, representative, impactful visualizations, informed through all possible media channels (social media, public campaigns, mainstream broadcast, newspapers, commercials)

## RECOMMENDATIONS

Limitations on water use (priorities only)

Be rational with irrigation

Boil the water and food to avoid contamination

To minimize exposure: keep the home cool, stay out of the heat and places with poor air quality, help others in danger, wear linen or cotton clothing)

# Measures to reduce drought risks

## **SHORT and MID-TERM ACTIONS**

Capacity building (e.g. health and social care systems, environment and educational programs, sensibilization efforts (solidarity and empathy campaigns), community initiatives in government actions)

Preventive actions (e.g. right to safe water, control and follow-up of diarrheal diseases, alerts to population, limit rural traffic, disseminate masks in case of high air pollution, surveillance of wildfires, reinforce mental health services)

## **LONG TERM ACTIONS**

- Sustainable urban planning
- GHG emission reduction schemes
- Knowledge-sharing
- Increased research funding
- Adaptive management of the hydrological cycle
- Improvement of the land and water management
- Conservation and restoration of ecosystems
- Promote nature-based solutions to crop resiliency

# MONITOR AND EVALUATION OF PLAN

Joining efforts from all institutions involved  
to share information and lessons learned  
(continuous knowledge sharing, M and E)

Calculation of the real impact

Economic evaluation

Improvements of the Drought Early Warning  
Systems

THANK YOU FUTUREMED SO VERY MUCH 😊