



Swiss TPH



Lessons learned from COVID-19 for the climate crisis

Dr. Martina Ragettli

Virtual Event Series session “Climate Change and COVID-19”
3 June 2021

COVID-19 and climate change are both global health emergencies

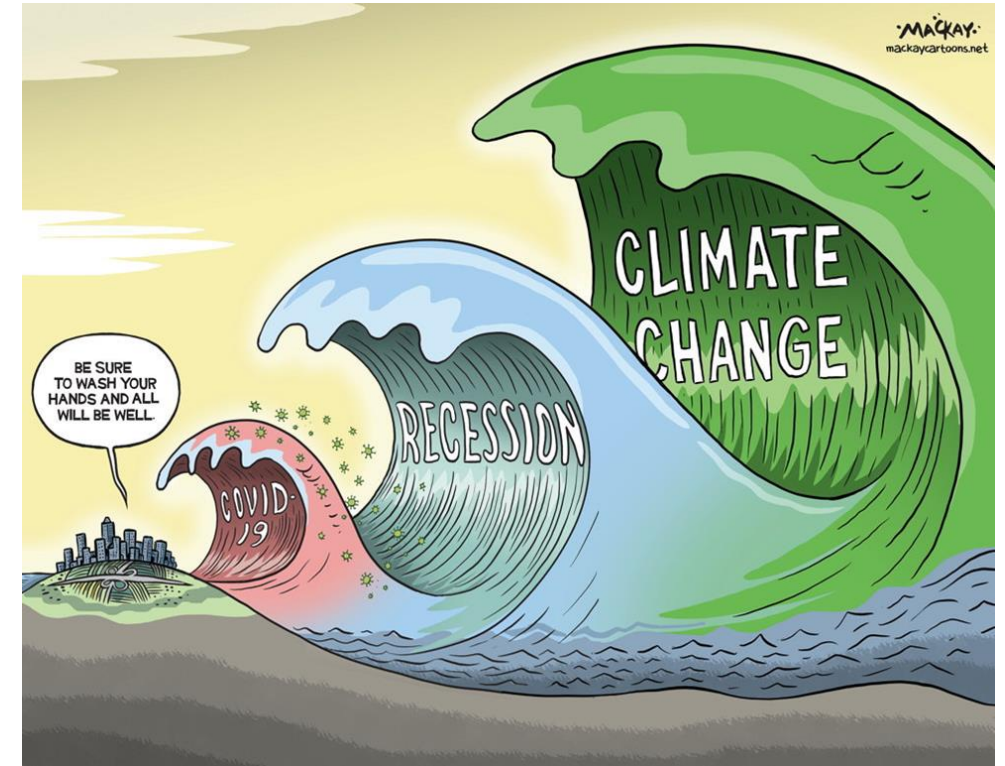
Human health depends on the health of our planet. Intact ecosystems are the foundation of all civilization and human health.



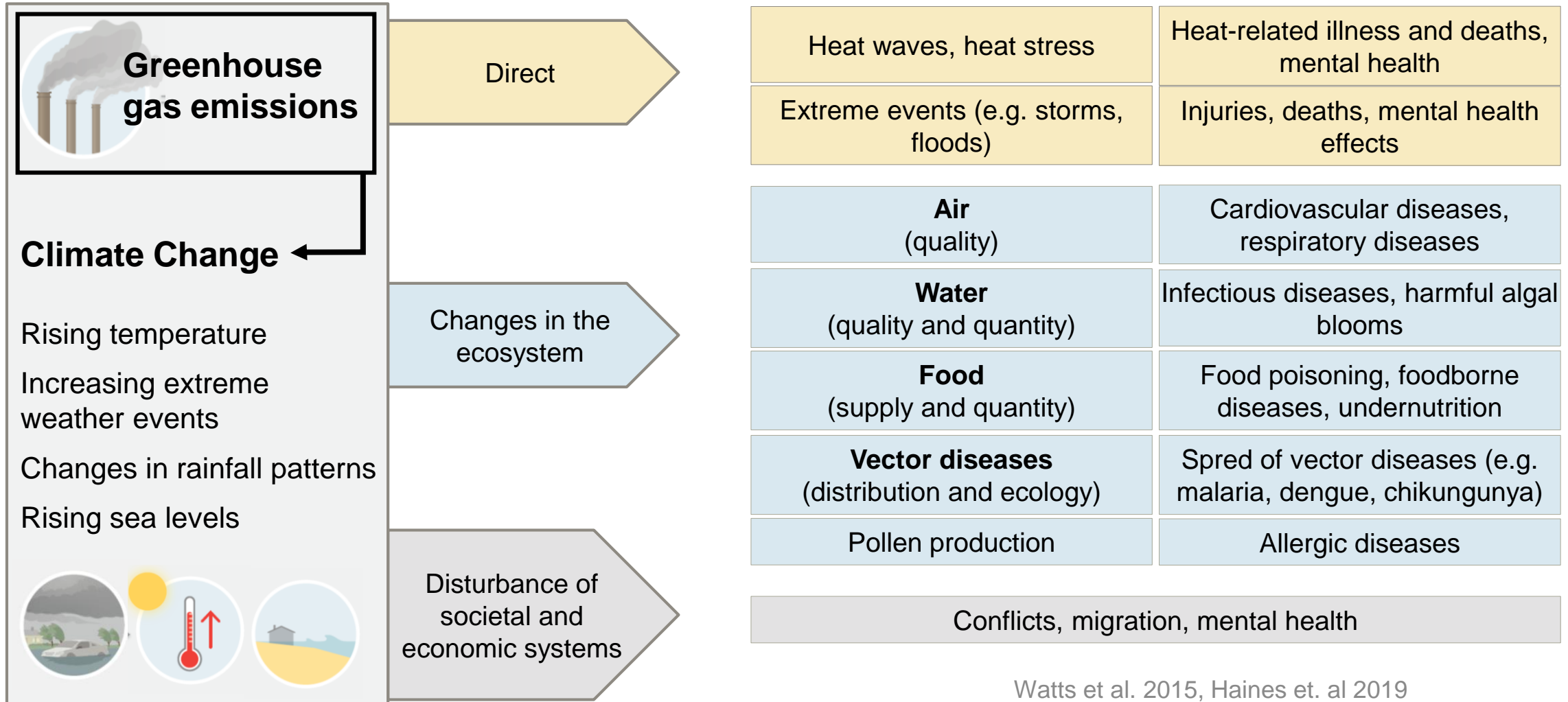
www.swisstph.ch



www.thelancet.com



Health effects of climate change



Watts et al. 2015, Haines et. al 2019

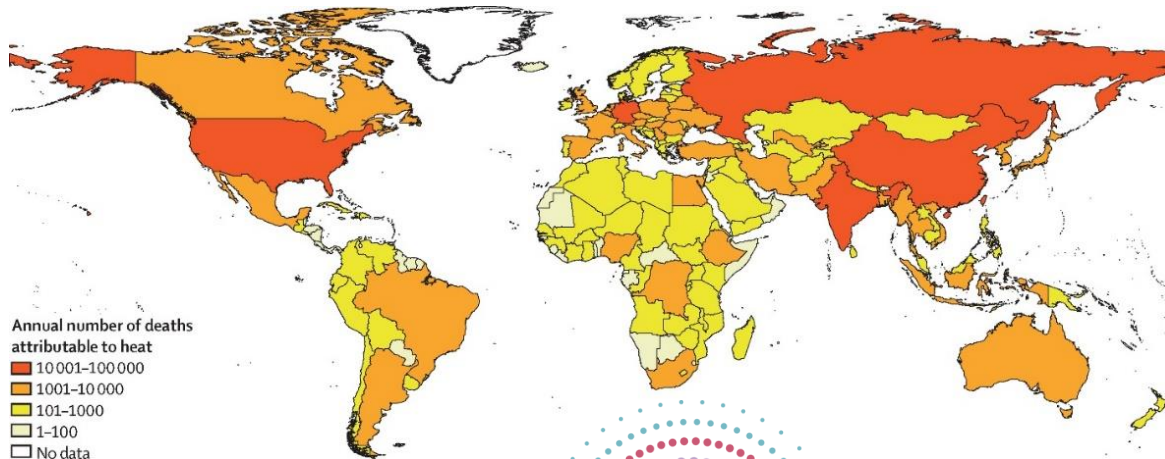
Lesson 1: No one is immune to a global (health) crisis

Health effect of climate change worldwide and in Switzerland (1)

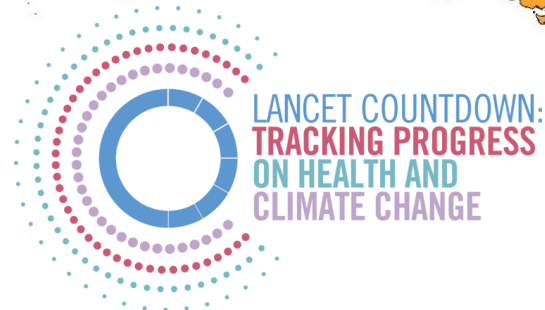
Heat waves, heat stress

Globally

From 2000 to 2018, heat-related mortality in people older than 65 years increased by 53.7% (296 000 deaths in 2018).

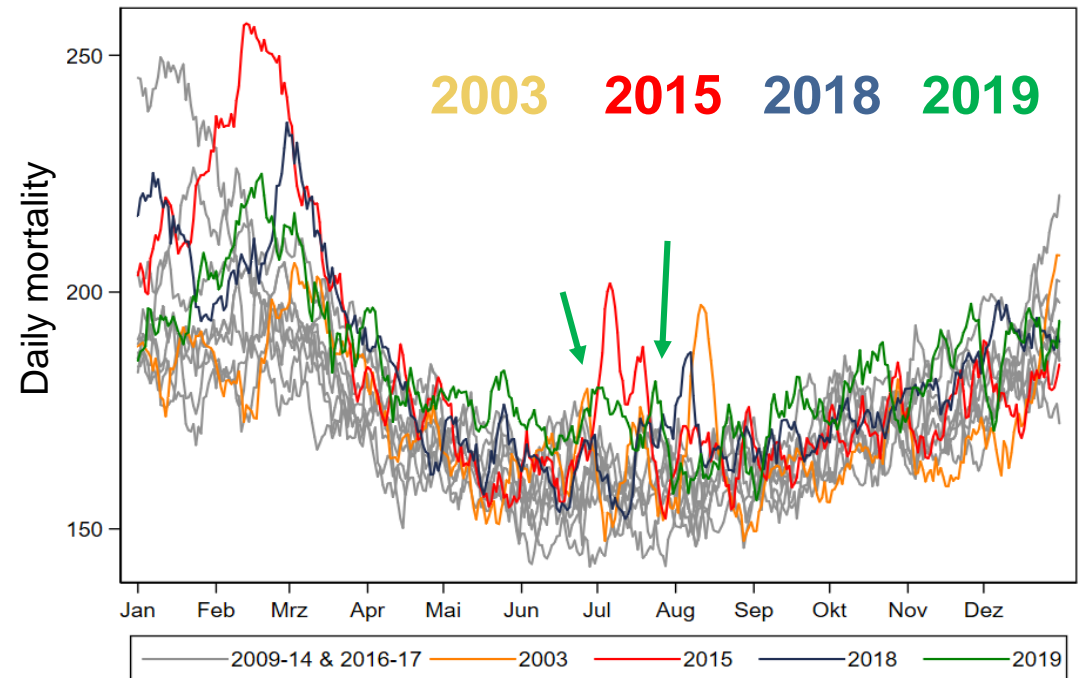


Lancet Countdown 2020



Switzerland

Heat waves cause additional deaths



Ragettli & Rösli 2021

“More Than a Third of Heat Deaths Are Tied to Climate Change”

(Vicedo-Cabrera et al. 2021)

Proportion of heat-related mortality attributable to human-induced climate change (%)



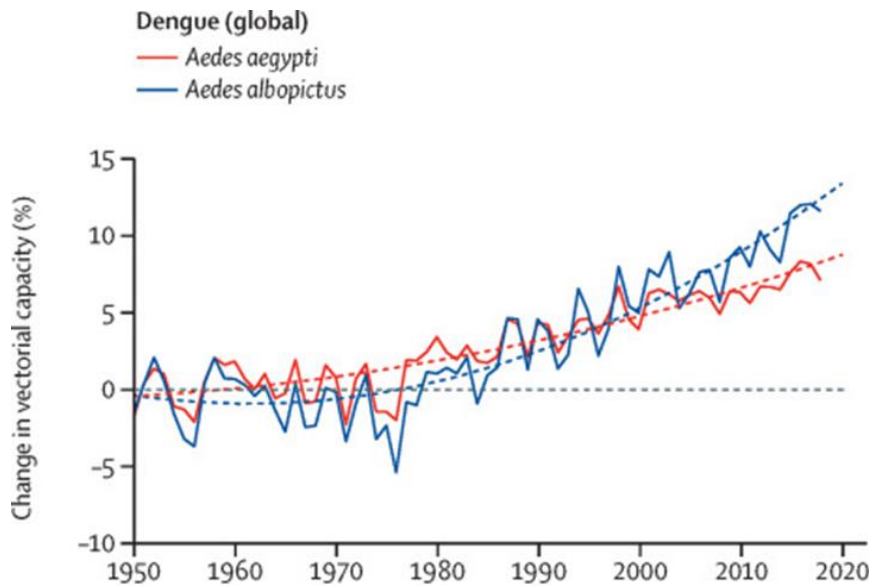
The burden of heat-related mortality attributable to recent human-induced climate change

Health effect of climate change worldwide and in Switzerland (2)

Vector diseases
(distribution and ecology)

Climatic conditions are increasingly suitable for the transmission of numerous infectious diseases

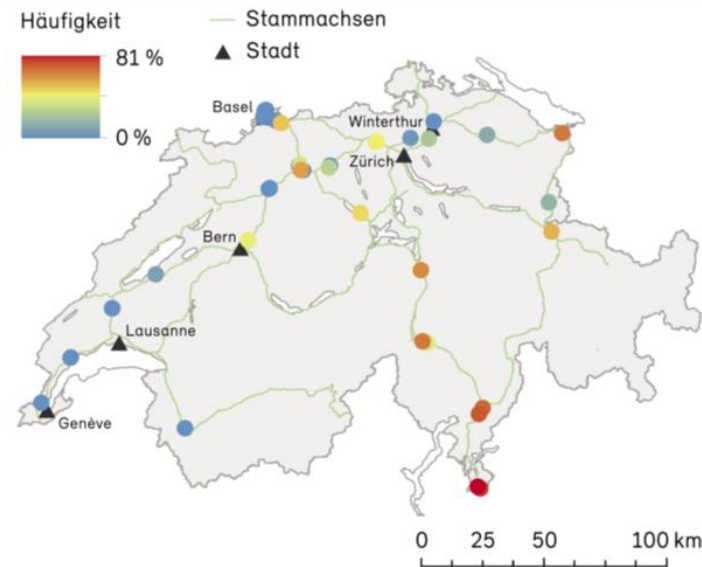
Globally



Change in climate suitability for dengue

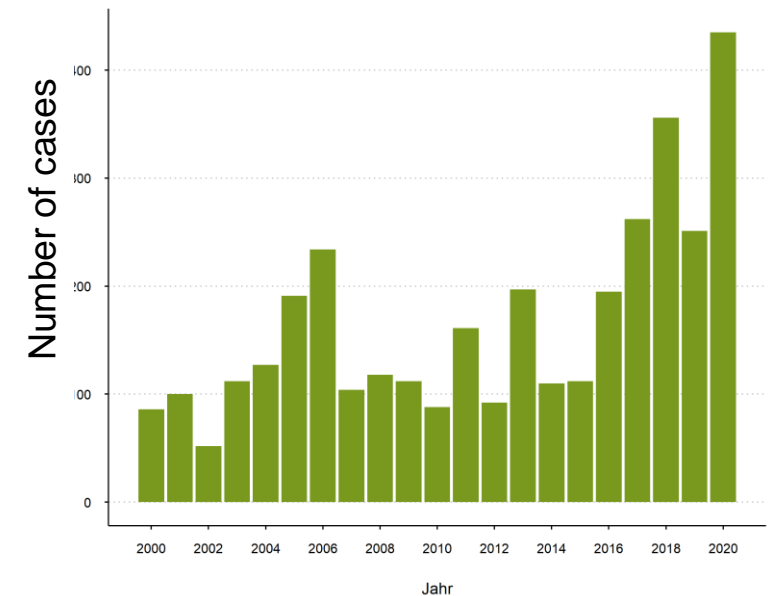
Lancet Countdown 2020

Switzerland



Introduction of *Aedes albopictus* along the main traffic routes in Switzerland

Müller et al. 2019



Annual cases of Tick-borne encephalitis (TBE) in Switzerland

BAG (2020)

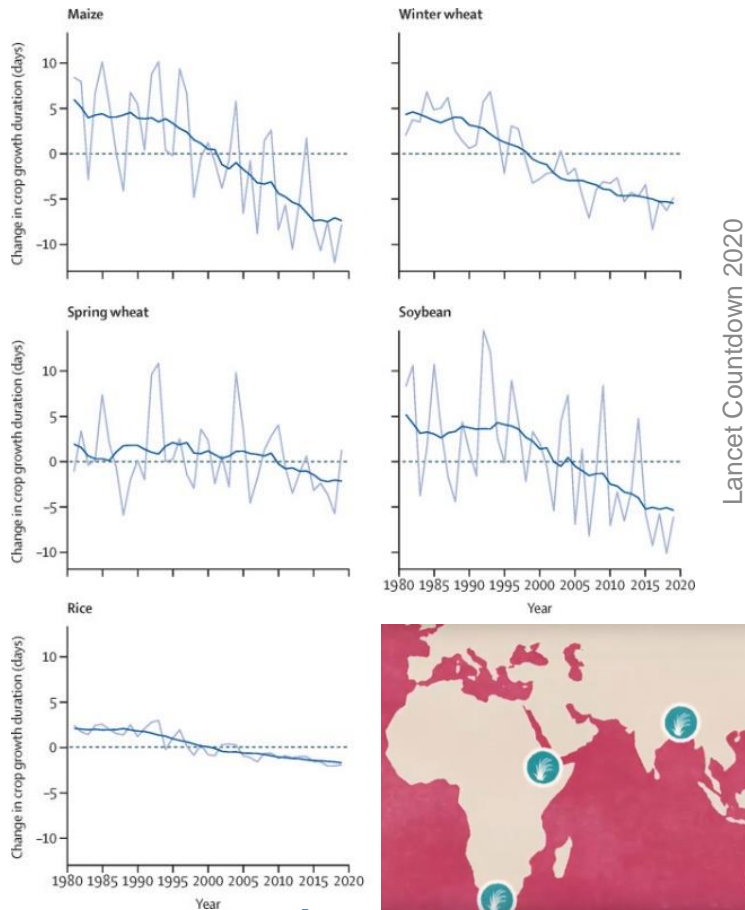
Health effect of climate change worldwide and in Switzerland (3)

Food
(supply and quantity)

Pollen production

Globally

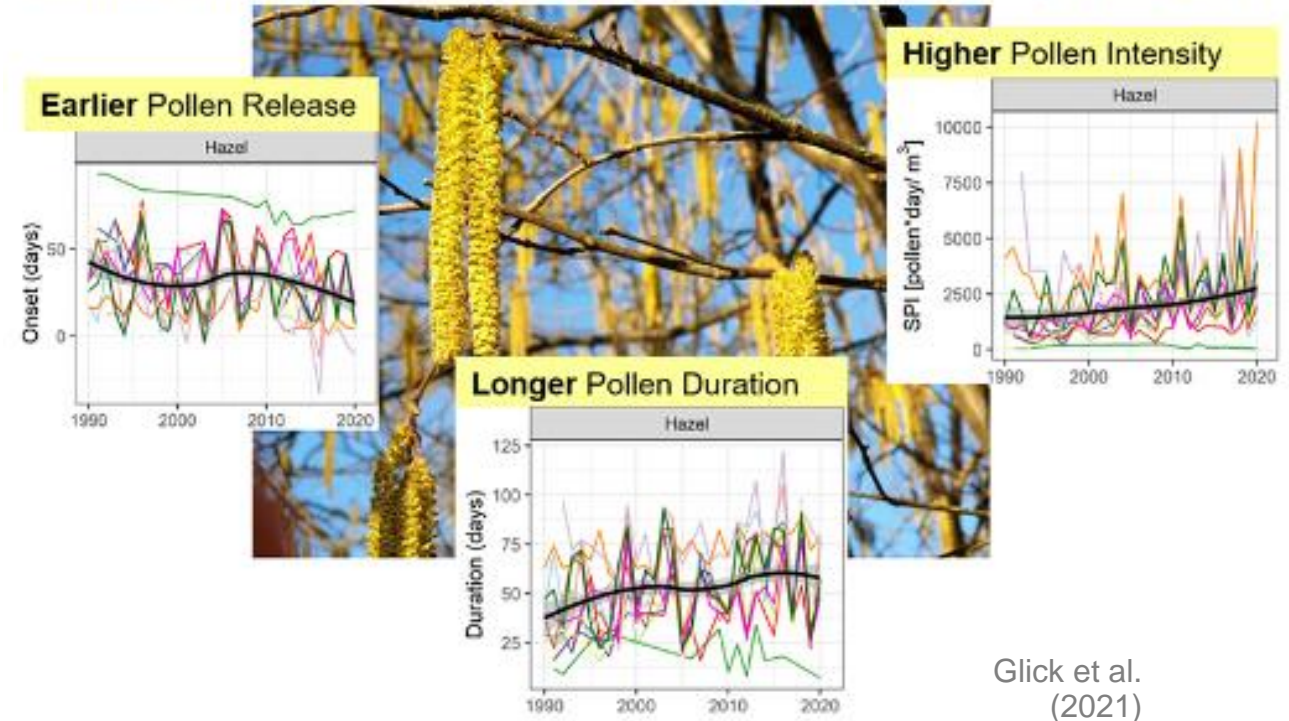
Reduction in crop yield potential



Switzerland

Earlier and more intense pollen season

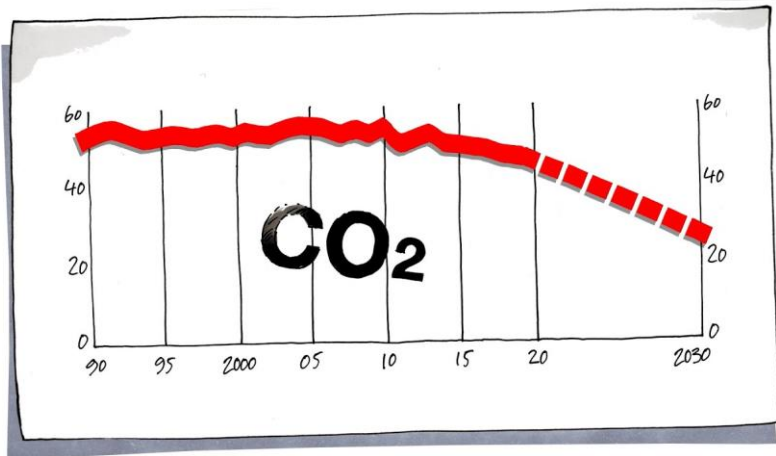
National trends for the pollen season: Switzerland, 1990-2020



Lesson 2: Prevention is better than cure

Mitigation

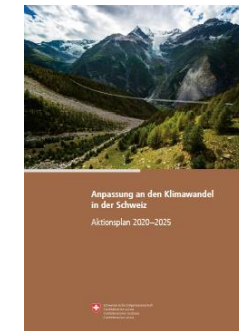
- Under the Paris Agreement Switzerland aims to cut its emissions by 50% relative to 1990 levels by 2030.
- Net-zero greenhouse emissions by 2050.
- Main basis for emission reduction measures is the CO₂ Act.



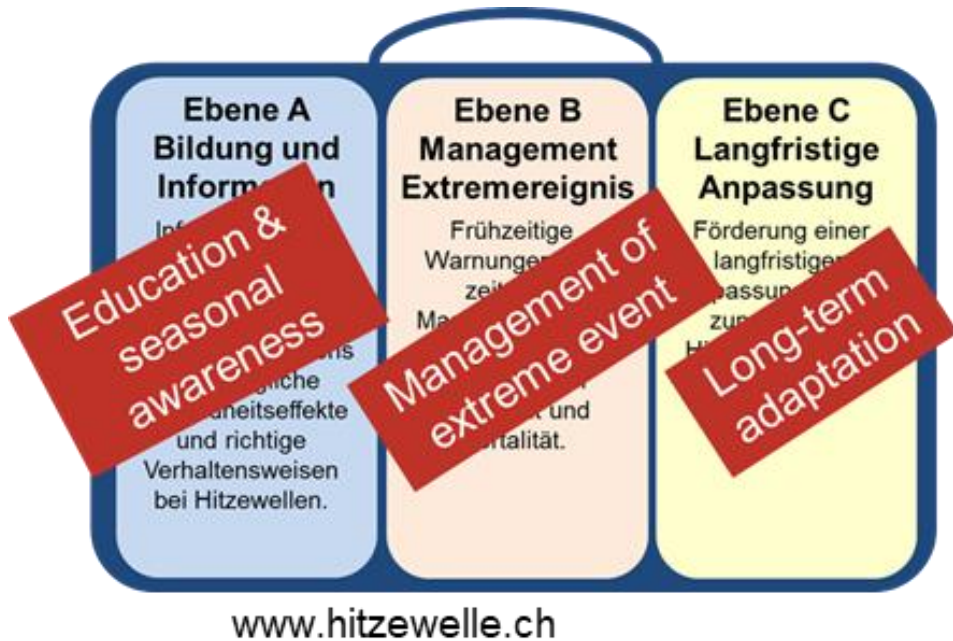
Visit: <https://www.uvek.admin.ch>

Adaptation

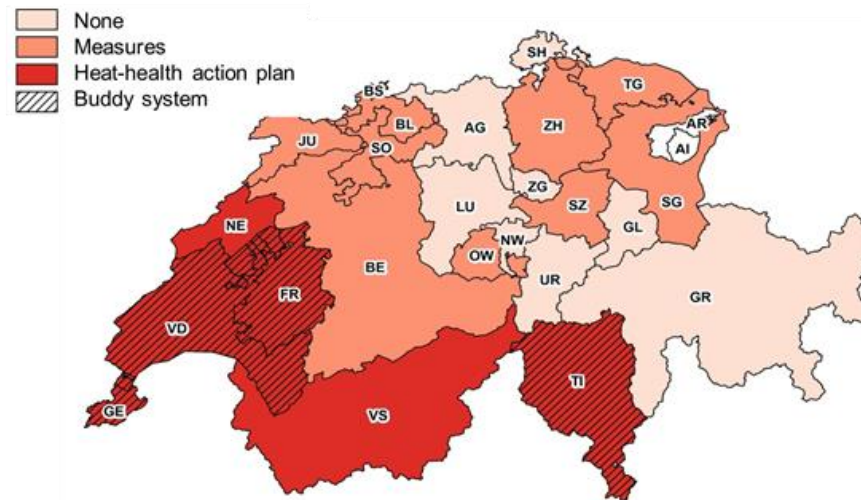
- 2012: Strategy “Adaptation to climate change” from the Federal Council
 - Minimize risks, exploit opportunities and increase the adaptability to climate change
- Action plans 2014-2019 and 2020-2025
 - Measures for various sectors (also health)
- Pilot program adaption to climate change (support of local projects)



Adaptation: Public health measures prevent heat-related deaths



Public health policies by Canton 2018



Lesson 3: Watch out for inequalities

Climate change and pandemic emergencies do not equally affect nations and social groups within a country

- Climate policy needs to take inequality into account.
- Minimizing social and health inequalities is crucial.

“As a society, we’re only as safe as our most vulnerable people.”

Christiana Figueres, previous executive secretary of the UN Framework Convention on Climate Change



Lesson 4: Find ways to get citizens involved

Using health to motivate progress to reduce greenhouse gases

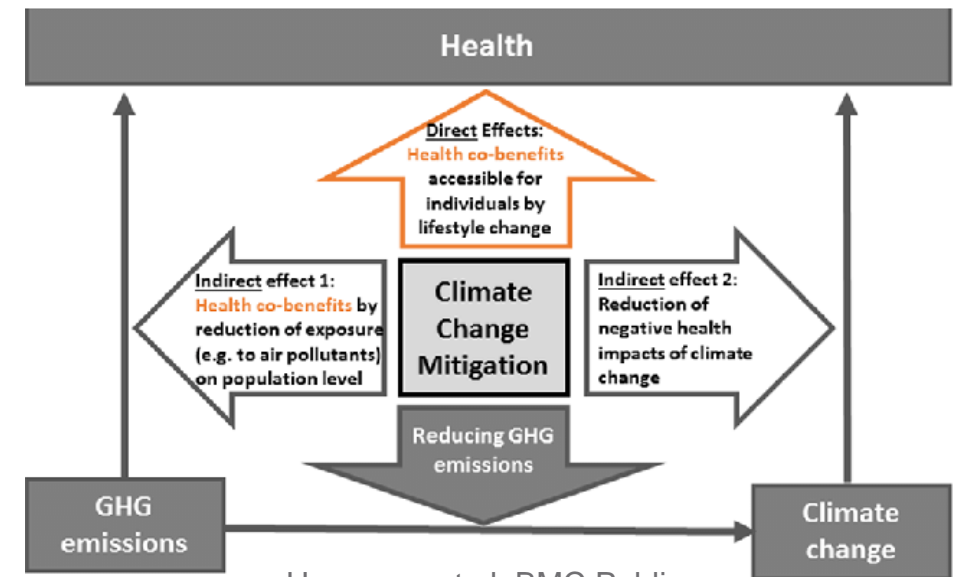
- Measures need to be communicated in a way that they inspires broad acceptance by the public.
- Change perceptions and tweak policies to make them more appealing: Actively highlight health co-benefits of climate policies.

Role of Health professionals

- Protect their patients' health from climate change.
- Advocate for action toward adaptation & mitigation policies.



(Swiss) Manifest for a healthy future (2020)



Herrmann et al. BMC Public Health (2018)



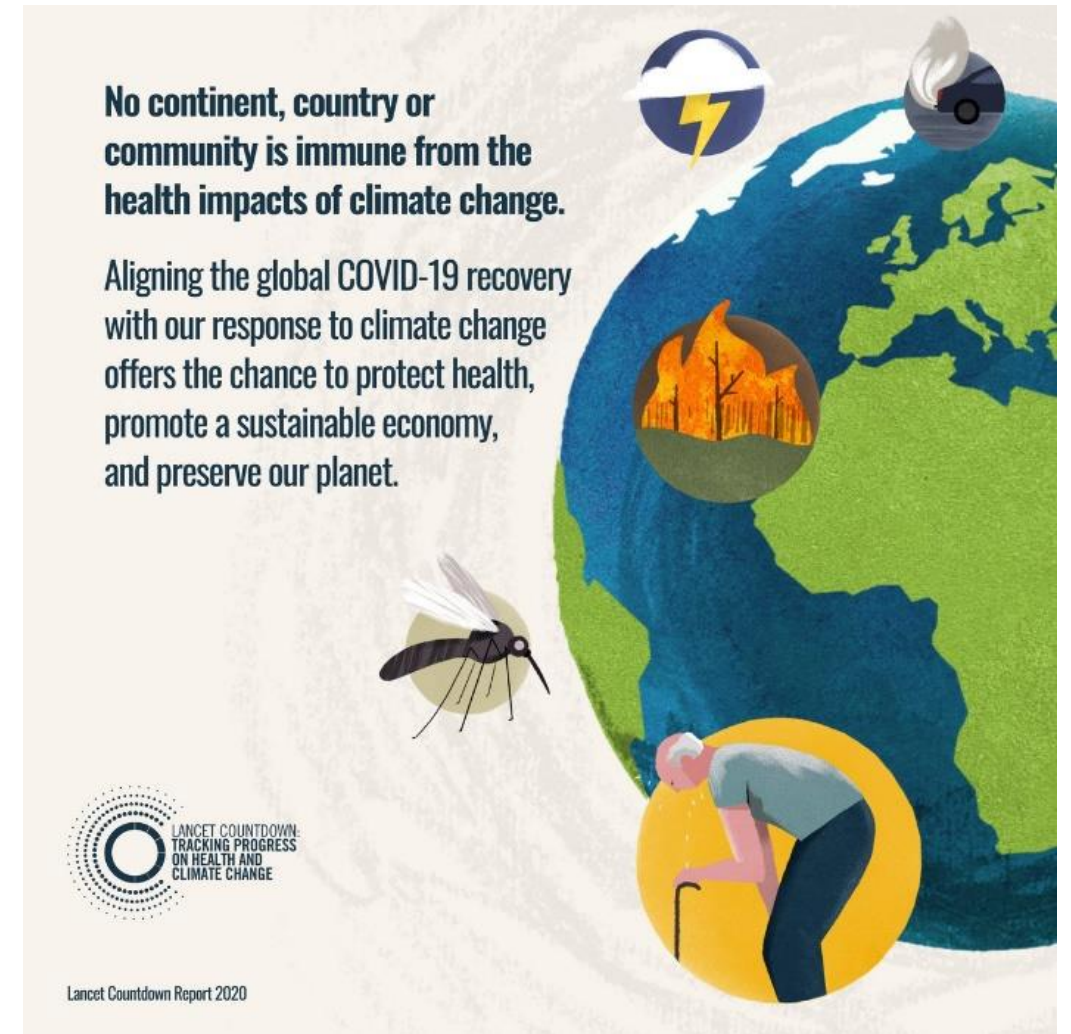
Verband Schweizerischer Assistenz- und Oberärztinnen und -ärzte
Association suisse des médecins-assistant(e)s et chef(fe)s de clinique
Associazione svizzera dei medici assistenti e capiclinica

Act now, delay is costly

Responding to the converging crisis offers a triple win:

- Preserve our planet
- Protect health
- Promote sustainable economy

See also: Impact story Swiss TPH: «A triple win awaits»



Acknowledgements

Prof. Dr. Martin Röösl



Thank you for your attention!

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Inspiration:

Klenert et al. 2020

Manzanedo et al. 2020

Lancet Countdown report 2020

Milner et al. 2020

Perkins et al. 2021