Lessons learned from COVID-19 for the climate crisis

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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.
Health effects of climate change

**Greenhouse gas emissions**

**Climate Change**
- Rising temperature
- Increasing extreme weather events
- Changes in rainfall patterns
- Rising sea levels

**Direct**
- Heat waves, heat stress
- Extreme events (e.g. storms, floods)
- Heat-related illness and deaths, mental health
- Injuries, deaths, mental health effects

**Changes in the ecosystem**
- Cardiovascular diseases, respiratory diseases
- Infectious diseases, harmful algal blooms
- Food poisoning, foodborne diseases, undernutrition
- Spred of vector diseases (e.g. malaria, dengue, chikungunya)
- Allergic diseases

**Disturbance of societal and economic systems**
- Conflicts, migration, mental health

**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)

Globally

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

Switzerland

Heat waves cause additional deaths

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Lancet Countdown 2020

Ragettli & Röösli 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 (%)
Health effect of climate change worldwide and in Switzerland (2)

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)

Globally
Reduction in crop yield potential

Switzerland
Earlier and more intense pollen season

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

Glick et al. (2021)
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.

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)

Visit: https://www.uvek.admin.ch
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)
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»
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Thank you for your attention!

Inspiration:
Klenert et al. 2020
Manzanedo et al. 2020
Lancet Countdown report 2020
Milner et al. 2020
Perkins et al. 2021

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