



vEGU21 Media Tip Sheet: Health-related sessions

Earth's air, water, soil, and rock directly impact human health around the world. In this collection of abstracts, researchers uncover the connections of geoscience to disease mobility, respiratory health, children's development, and future societal health.

Week 1 (19-23 April)

Epidemics and Human Mobility

Humans move freely around the planet—what does this mean for forecasting and controlling the spread of epidemics? How new proxies, like dollar bills, can be used to model human mobility.

Fri 23 Apr 15:30 CEST

Session [US2](#): Post-Covid Geosciences

Week 2 (26-30 April)

Effects of air pollution on neurodegenerative diseases (Alzheimer's disease and vascular dementia) over Europe for present and future climate change scenarios

An analysis of exposure of air pollution in Europe to the incidence of dementia (Alzheimer's and vascular dementia), both today and in a warmer future.

Wed 28 Apr 13:30 CEST

Session [AS3.19](#): Air Pollution Modelling

Intensity and frequency of extreme novel epidemics

Researchers looked at a historical record (1600-present) of infectious diseases to better understand how often humans may experience large-scale epidemics.

Thurs 29 Apr 14:22 CEST

Session [ITS1.1/NP0.2](#): Covid-19 pandemic: health, urban systems and geosciences

Handwashing and water security in the context of a pandemic

Globally, an estimated 40% of households don't have basic handwashing facilities—all related to water insecurity. Researchers talk about the need for policymakers to tackle water insecurity, quality, and accessibility, and how to best prepare societies for the future.

Thurs 29 Apr 15:56 CEST

Session [ITS1.1/NP0.2](#): Covid-19 pandemic: health, urban systems and geosciences

Geological occurrence, mineralogical character and preliminary risk assessment of carcinogenic erionite in New Zealand

Erionite, a mineral found in volcanic rocks that are common to places like New Zealand, appears to be more toxic than asbestos. Researchers examine the health effects of inhaling dust particles containing erionite, and how common the mineral is in the air.

Fri 30 Apr 9:30 CEST

Session [ITS3.8/SSSI](#): Geochemistry and human health: fundamentals and approaches towards improvement of risk assessments and practical recommendations

[Having a dry start into life – Drought impacts on child health in Malawi](#)

In a changing climate, droughts are expected to become more common and more intense. Researchers looked at what health impacts happen to children during periods of drought in Malawi.

Fri 30 Apr 11:05 CEST

Session [NH9.10](#): Drought risk, vulnerability and impact assessment: achievements and future directions

[Influence of Saharan-Sahel dust outbreaks on pollen exposure in the Iberian Mediterranean areas](#)

An analysis of the influence of dust episodes on pollen exposures in the Iberian Mediterranean region. The research may have implications for defining health emergency alerts.

Fri Apr 30 13:48 CEST

Session [AS3.7](#): Atmospheric transport: from classical particles and gases to airborne microplastics.

[Assessment of the Risk of Thyroid Cancer in Rural Settlements in the Areas of the Bryansk Region \(Russia\) Affected by the Chernobyl NPP Accident](#)

Researchers weigh rural and urban thyroid cancer rates and mortality to understand what increases health risks in Bryansk region, Russia.

Fri 30 Apr 9:14 CEST

Session [ITS3.8/SSSI](#): Geochemistry and human health: fundamentals and approaches towards improvement of risk assessments and practical recommendations