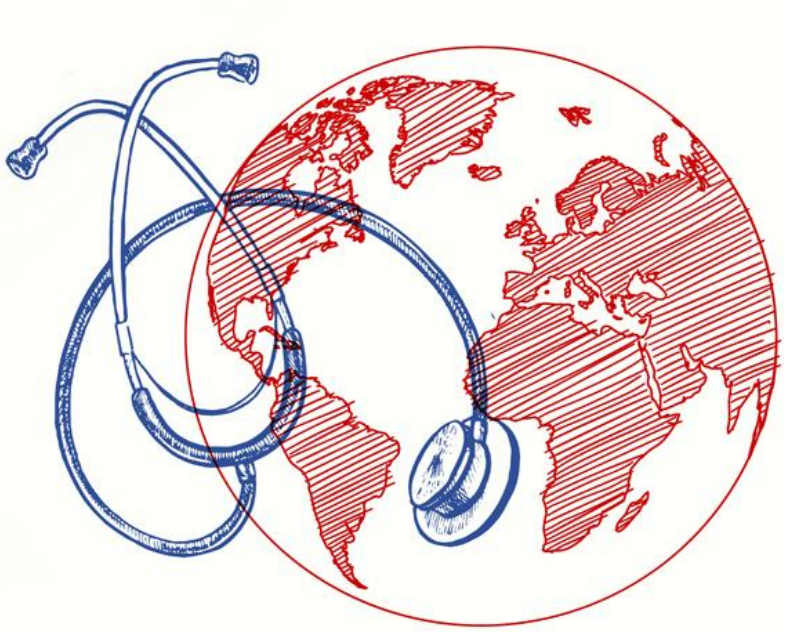
Global Health Cast 64

April 26th, 2024



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What we talk about today

- UPDATE: avian Flu (H5N1) in the USA
- WHO definition of “airborne”
- LRTI and Global Health
- Increased cases of psittacosis in Argentina
- Physical Activity reduces CVD risk
- Call for Collaborators in Asia for Health Literacy websites

Disease Outbreak News

World Health Organization

Avian Influenza A(H5N1) - United States of America

9 April 2024

The World Health Organization (WHO) was notified about a **laboratory-confirmed case of human infection with an influenza A(H5N1) virus on 1 April 2024** by the United States of America IHR National Focal Point (NFP). The patient developed symptoms on 27 March and had a history of exposure to dairy cattle (cows). **This is the second confirmed human case of influenza A(H5N1) detected in the country** presumed to be infected with influenza A (H5N1) virus. It also appears to be the first human infection with A(H5N1) acquired from contact with an infected mammal, although human infections with other influenza subtypes have previously been acquired from mammals. No additional associated cases of human infection with influenza A(H5N1) have been identified. Since the **virus has not acquired mutations that facilitate transmission among humans** and based on available information, WHO assesses the public health risk to the general population posed by this virus **to be low** and for **occupationally exposed persons, the risk of infection is considered low-to-moderate.**

US-CDC (April 25, 2024)

Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

H5N1 Bird Flu: Current Situation Summary

Español | Other Languages Print

Updated April 25, 2024

- H5N1 bird flu is widespread in wild birds worldwide and is causing outbreaks in poultry and U.S. dairy cows with one recent human case in a U.S. dairy worker.
- While the current public health risk is low, CDC is watching the situation carefully and working with states to monitor people with animal exposures.
- CDC is using its flu surveillance systems to monitor for H5N1 activity in people.

Monitoring for H5 in People

World Health Organization (WHO)

18 April 2024 | News release

Leading health agencies outline updated terminology for pathogens that transmit through the air

Transmission of pathogens through the air

World Health Organization

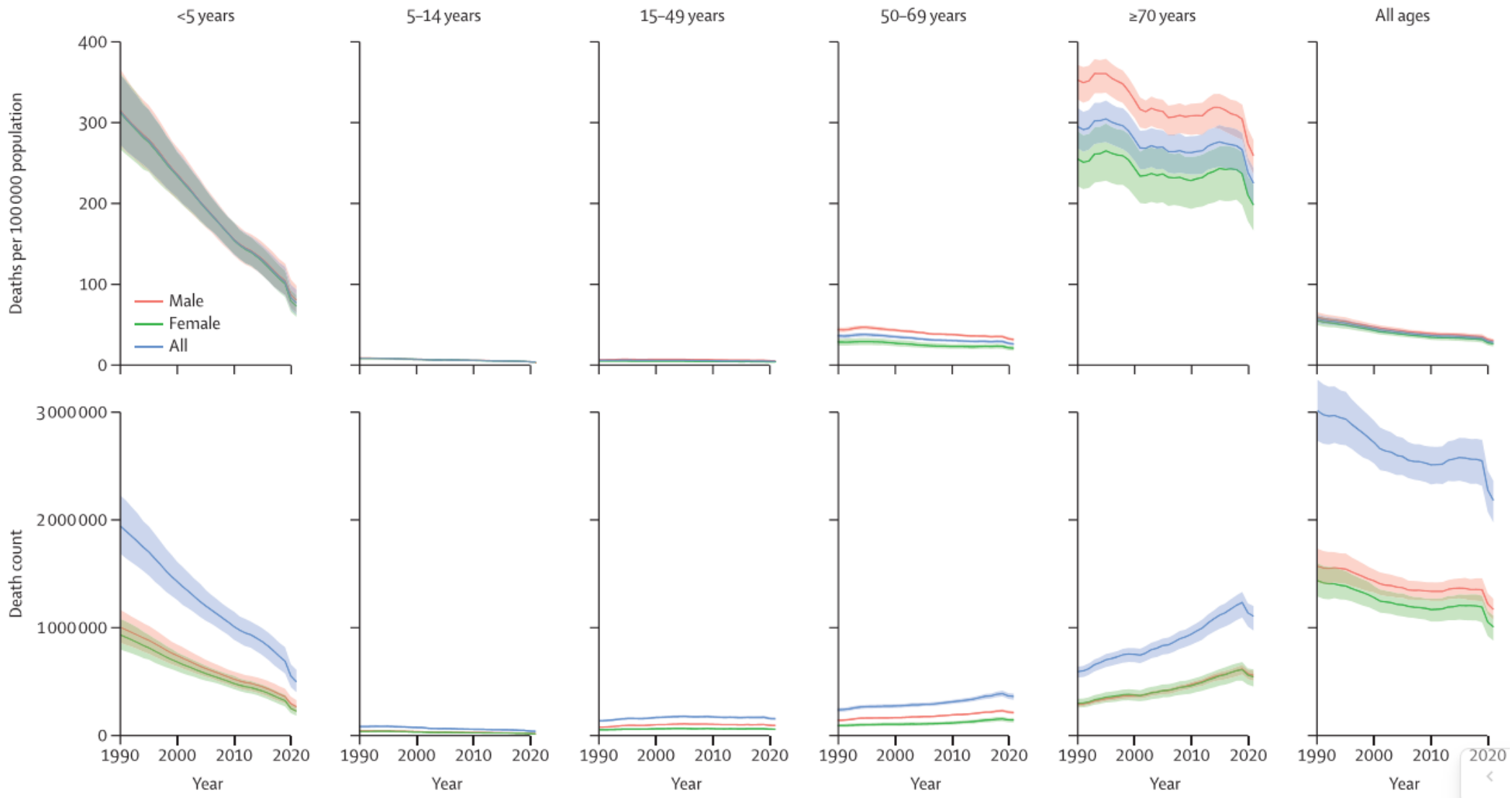
- Individuals infected with a respiratory pathogen can generate and expel infectious particles containing the pathogen, through their mouth or nose by breathing, talking, singing, spitting, coughing or sneezing.
- These particles should be described with the term ‘infectious respiratory particles’ or IRPs.
- IRPs exist on a continuous spectrum of sizes, and no single cut off points should be applied to distinguish smaller from larger particles.
- This facilitates moving away from the dichotomy of previously used terms: ‘aerosols’ (generally smaller particles) and ‘droplets’ (generally larger particles)

Definitions

1. **Airborne transmission or inhalation,** for cases when IRPs are expelled into the air and inhaled by another person. Airborne transmission or inhalation can occur at a short or long distance from the infectious person and distance depends on various factors (airflow, humidity, temperature, ventilation etc). IRPs can theoretically enter the body at any point along the human respiratory tract, but preferred sites of entry may be pathogen-specific.

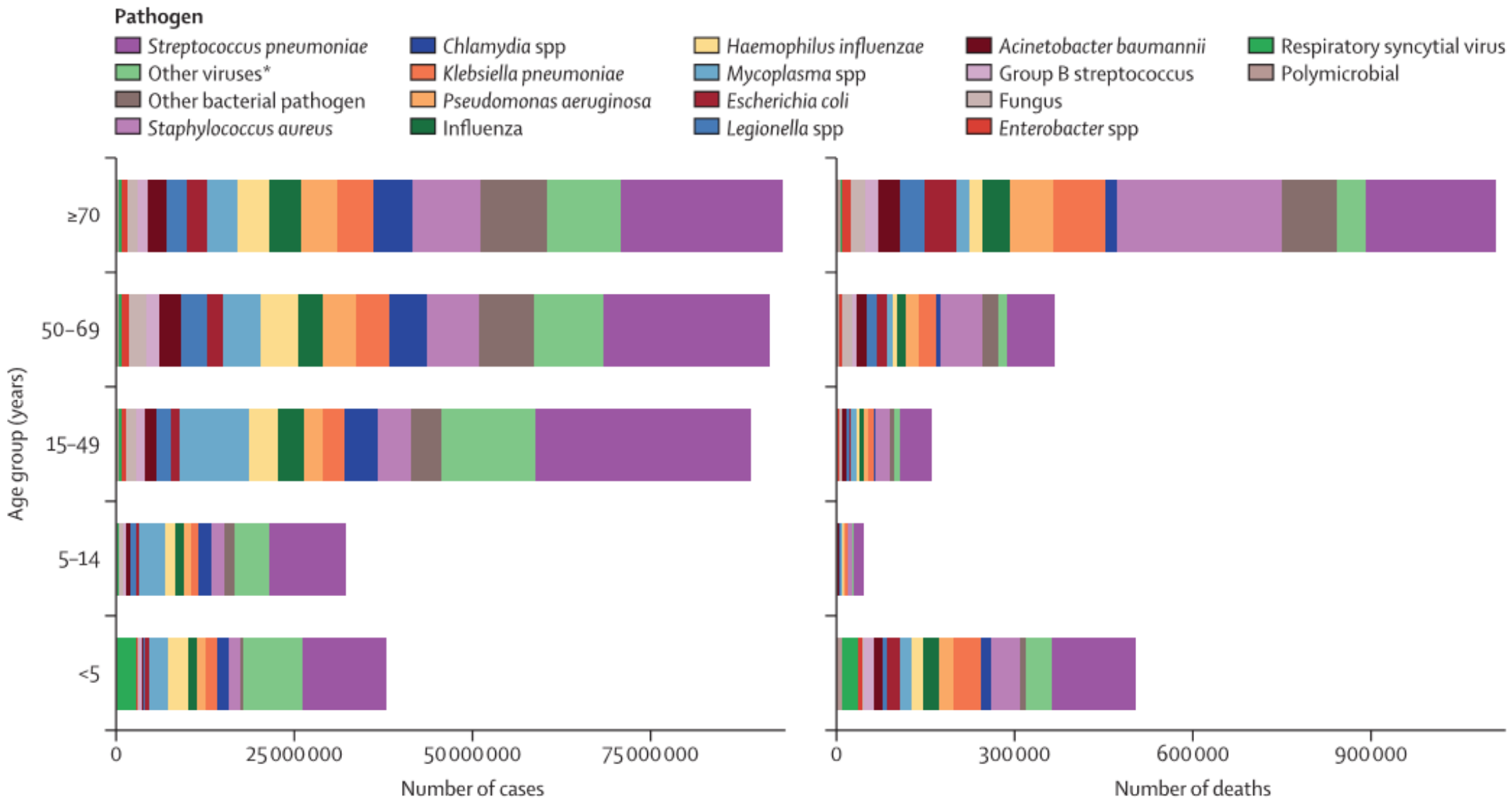
2. **Direct deposition,** for cases when IRPs are expelled into the air from an infectious person, and are then directly deposited on the exposed mouth, nose or eyes of another person nearby, then entering the human respiratory system and potentially causing infection.

LRI mortality rates and death counts by age and sex, 1990–2021



Bender R et al., The Lancet Infectious Diseases 2024 - DOI: 10.1016/S1473-3099(24)00176-2

Aetiology distribution of global LRI cases and deaths by age group, 2021



Bender R et al., The Lancet Infectious Diseases 2024 - DOI: 10.1016/S1473-3099(24)00176-2

Ranked aetiologies by number of global cases and deaths across all ages, 1990, 2019, 2020, and 2021

An increase in cases of psittacosis was observed in the study of severe acute pneumonia

Faced with this situation, we are working with health actors to raise awareness of epidemiological surveillance and inform health teams, promote early detection, diagnosis and appropriate clinical management, and disseminate prevention and control measures.

Psittacosis is an infectious disease usually spread to humans from infected birds in the parrot family. Domestic turkeys and pigeons have also infected people.

Health Topics | Countries | Newsroom | Emergencies

Disease Outbreak News

Psittacosis – European region

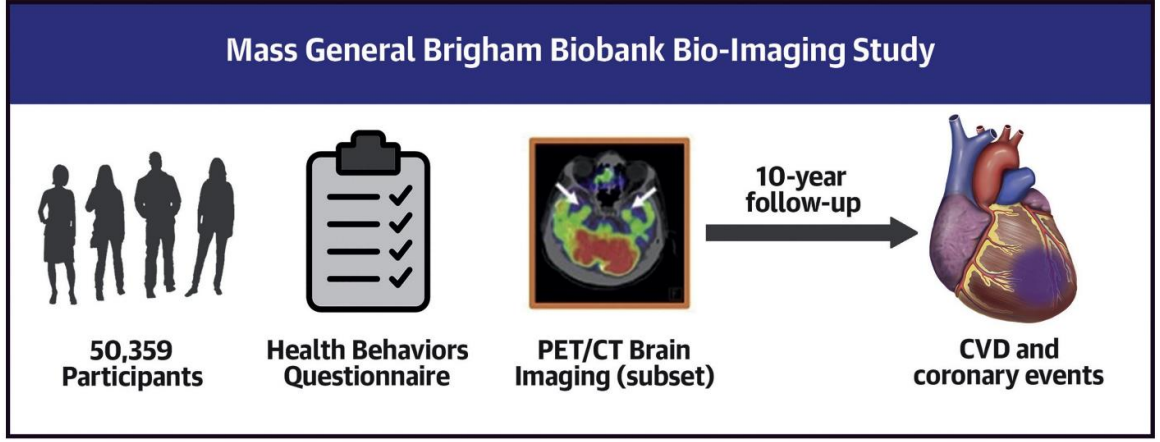
5 March 2024

Situation at a Glance

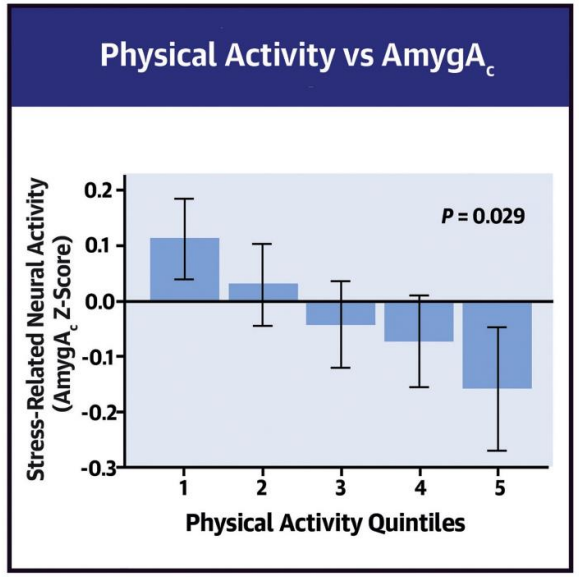
In February 2024, **Austria, Denmark, Germany, Sweden** and **The Netherlands reported an increase in psittacosis cases observed in 2023 and at the beginning of 2024**, particularly marked since November-December 2023. Five deaths were also reported. Exposure to wild and/or domestic birds was reported in most of the cases. **Psittacosis is a respiratory infection caused by Chlamydophila psittaci (C. psittaci), a bacteria that often infects birds**. Human infections occur mainly through contact with secretions from infected birds and are mostly associated with those who work with pet birds, poultry workers, veterinarians, pet bird owners, and gardeners in areas where C. psittaci is epizootic in the native bird population. The concerned countries have implemented epidemiological investigations to identify potential exposures and clusters of cases. Additionally, implemented measures include the analysis of samples from wild birds submitted for avian influenza testing to verify the prevalence of C. psittaci among wild birds. The World Health Organization continues to monitor the situation and, based on the available information, assesses the risk posed by this event as low.

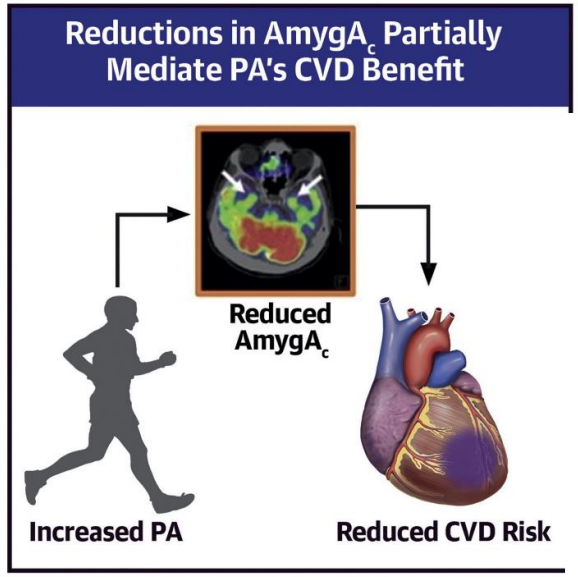
HEALTH PRESS

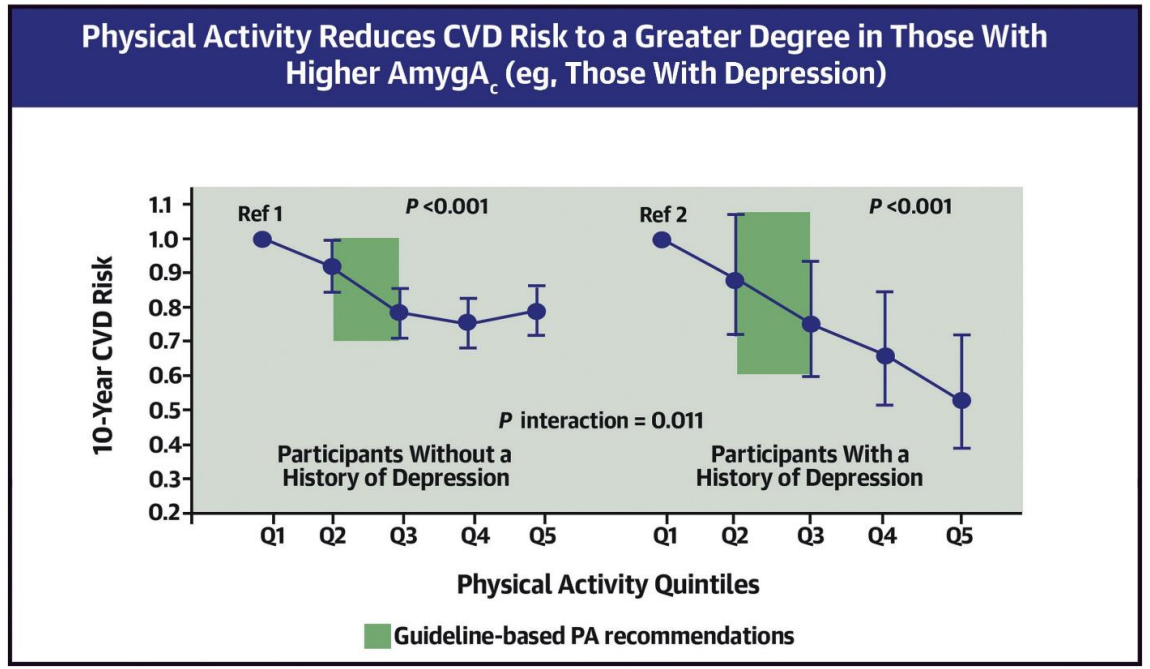
https://www.argentina.gob.ar/noticias/se-verifico-un-aumento-de-casos-de-psitacosis-en-el-marco-del-estudio-de-neumonias-agudas



Physical Activity PA appears to reduce CVD risk in part by acting through the brain's stress-related activity; this may explain the novel observation that PA reduces CVD risk to a greater extent among individuals with depression.



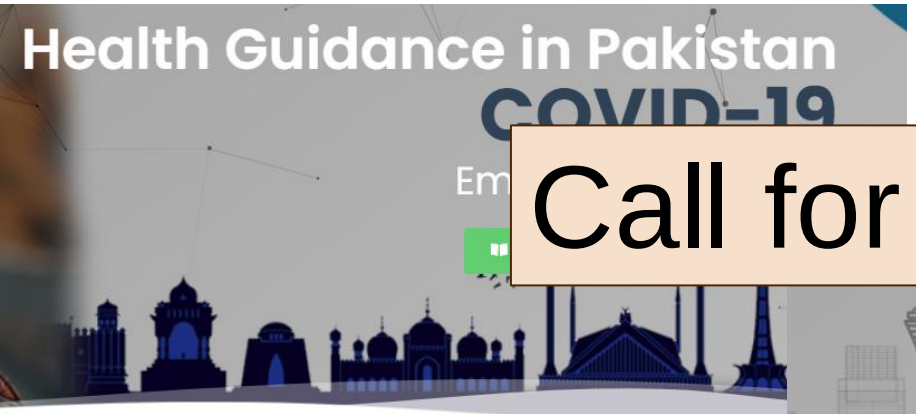




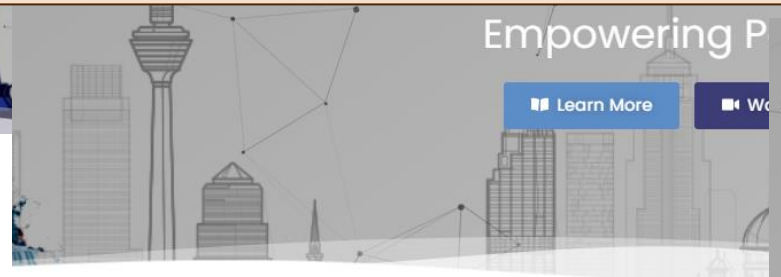
Effect of Stress-Related Neural Pathways on the Cardiovascular Benefit of Physical Activity

Zureigat H, et al. J Am Coll Cardiol. 2024;83(16):1543-1553.

About Us – Health Literacy (healthliteracyasia.com)



Call for collaborators in ASIA



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