

COVID-19: Endemic Impact & Responsibility

Presentation Titles & Descriptions

An Overview of COVID-19 and Long COVID – The UK Inquiry

Dr. Jonathan Fluxman presents a COVID-19 update, summarizing our current knowledge and mistakes made during the pandemic. COVID-19 is more of a vascular and immunological disease than a respiratory one. It is primarily spread through respiration and the virus is airborne. The delayed recognition and then once recognized the failure to act to prevent airborne spread is one of the greatest mistakes of the epidemic. Vaccines provide a degree of protection against hospitalizations, deaths and long COVID but not nearly enough to abandon other mitigation measures. Improvements in ventilation are crucial to mitigating indoor spread. The importance of this is underscored by the pandemic being largely driven by super spreader events in congregate settings. Of great concern are the reinfections which are occurring, almost everyone has been infected several times and with each infection the chances of developing long COVID increases. Even children are affected. It is estimated that 12% of children develop long COVID after the first infection, and 16% after the second. The implications of long COVID and delayed organ damage on our society is discussed. Finally, a critique of the United Kingdom's COVID-19 is presented with a discussion of its shortcomings and needed improvements.

Navigating COVID-19: How Kidney Patients Have Taken Responsibility to Protect Themselves

Paul Conway, Chair of Policy & Global Affairs - American Association of Kidney Patients (AAKP) presents on the continued dangers of COVID-19 and calls on the Federal government and healthcare industry to continue strategies to protect vulnerable patients.

In addition to continued mitigation and prevention of COVID-19, the government should:

- Align regulation and payment policies for vaccine innovation.
- Foster innovation for immunosuppressive drugs for transplant patients via the FDA immediately.
- Formalize telemedicine flexibilities.
- Expand home dialysis options so more patients can qualify.
- Protect the rights of kidney patients under the ADA.
- Expand data transparency and access to patients, researchers and elected officials.

Finally, the CDC needs to implement stronger mitigation strategies in healthcare settings to ensure the safest possible healthcare for vulnerable patients.

Long COVID In Scotland

Sally Witcher, PhD and Jane Ormerod from long COVID Scotland discuss the status of the COVID-19 pandemic and long COVID in the United Kingdom and Scotland. The presenters stressed the

lack of available healthcare for those suffering from long COVID and also the lack of gathering data and transparency regarding the magnitude of the problem. Governmental strategies are over reliant on vaccinations and even if vaccines produced ironclad durable immunity, they are not widely available to the general public. Few if any are masking, including medical personnel in major healthcare centers. Similar to many countries, there is rampant misinformation which is inhibiting the public health response. Currently, the United Kingdom's workforce is being adversely affected to a large degree by chronic illnesses, but there remains little discussion or recognition of the impacts of long COVID.

Irregular reemergence of pathogens after lifting of pandemic restrictions

Dr. Matthias Maiwald, MD, presents on the patterns of pathogen re-emergence after the COVID-19 pandemic. This is based on respiratory multiplex PCR data from a major women's and children's hospital in Singapore between 2019 and 2023. The dataset includes 83,250 results, mostly from paediatric patients. Pandemic response measures disrupted the usual patterns of respiratory pathogens, and the subsequent relaxation affected their re-emergence. Nonenveloped viruses returned first, and some viruses (e.g. respiratory syncytial virus [RSV]) had out-of-season peaks that were higher than pre-pandemic peaks, and some other viruses (e.g. adenovirus and metapneumovirus) had unusual phases of high activity. Bordetella pertussis (agent of whooping cough) remained near-absent until the end of 2023, while Bordetella parapertussis (agent of parapertussis) and Mycoplasma pneumoniae (agent of childhood pneumonia) started to return around March 2023. Population-based immunological susceptibility and unusual exposure patterns presumably played a role in these observed phenomena.

Source Control Key to Prevent Spread of Infectious Diseases

Dr. Kevin Kavanagh discusses the importance of source control as it relates to ventilation, masking and isolation. He also discusses concerns with new proposals regarding the relaxation of isolation guidelines for COVID, MRSA and Measles. Finally, concerns regarding Enhanced Barrier Precautions and Chlorhexidine Bathing are discussed

Overview of the Impacts of Long COVID on Behavioral Health.

Dr. Jacqueline H Becker discusses the definition of Long COVID along with its incidence, impacts on disparate populations and challenges in treatment. The presentation emphasizes the impact of Long COVID on cognitive abilities, executive function and personalities along with potential biological and environmental etiologies.

Impacts of COVID-19 in Pathology and Cancer Care

Dr. Kaitlin Sundling, MD, PhD discusses the impact of COVID-19 on cancer patients and needed precautions the healthcare system needs to adopt to augment the safety of immunocompromised patients. A comprehensive listing of topics and discussions are listed in the timeline below.

Topics Include:

- Decrease in cancer screening during the pandemic.

- Impact of COVID-19 on cancer screening.
- Parallels between COVID-19 antivax movement and HPV vaccination adoption.
- Pathology examples of COVID-19's multi-system organ damage.
- Long-term impact of COVID-19 on cancer risks is not known.
- Many forms of Long COVID.
- How can cancer patients decrease the chances of catching COVID-19?
- Healthcare facilities and providers need to implement strategies to protect high-risk patients.
- COVID-19 vaccination of cancer patients.
- Misinformation similarities with COVID-19 and cancer.
- Impact of COVID-19 on pathology practices and resident training, along with mitigation strategies.

Vaccines & COVID-19

Dr Kevin Kavanagh discusses the history of vaccines with emphasis on George Washington, Variolation and the Continental Army Smallpox Mandate. Several points are stressed: 1. that herd immunity is not possible with a mutating virus and waning immunity. 2. All vaccines have complications, but they are much less than acquiring the disease. 3. Myocarditis appears to be most common with the second dose of the Moderna Vaccine in young males, but it is still a rare often mild event. 4. Natural infection may give a few months longer immunity than vaccines. However, neither gives durable immunity, and becoming infected every year is not a viable plan. 5. Over 6% of adults living in the United States complain of symptoms of Long COVID. 6. Vaccinations can prevent over 70% of the cases of Long COVID. 7. Reinfections are common, and each carries an additive risk of Long COVID. 8. Delayed deaths from COVID-19 exceed those from the acute disease. Types of COVID-19 vaccines are discussed, along with risks and benefits