



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

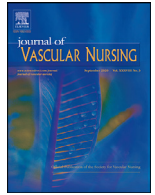
Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



ELSEVIER

Contents lists available at ScienceDirect

Journal of Vascular Nursing

journal homepage: www.sciencedirect.com/journal/journal-of-vascular-nursing

Influenza: Preparing amidst a pandemic



Jasmiry Bennett

In 2020, there were minimal flu cases reported across the United States (US). Flu season came and went without much impact. What happened to the flu virus? There are speculations that our masking protocol may have impacted and almost eradicated the flu virus last year compared to previous years. In the US, flu season starts in the fall and into early spring, peaking in December through February (CDC, 2021). According to the Centers for Disease Control and Prevention (2020),² deaths in the US associated with flu in 2019-2020 were estimated at 22,000 compared to previous year 2018-2019 with 34,000 deaths and 2017-2018 with 64,000 deaths respectively. According to Lutz,³ hygiene and physical distancing may have impacted the rate of flu transmission.

As scientists prepare to forecast influenza for 2020-2021, SARS-CoV-2 (COVID-19) poses a challenge. The CDC organizes the FluSite challenge, where the goal is to predict weighted influenza-like-illness (wILI) counts in the US annually (Biggerstaff et al., 2016 as cited in,⁴ pg 1). Due to similarities between symptoms for COVID-19 and the flu, there are concerns the wILI counts may be contaminated in the current and possible future influenza seasons, reducing predictability accuracy.⁴ Flu predictability was not a perfect science prior to the COVID-19 pandemic; however the inability to predict influenza strain accurately can potentially burden health-care institutions. The COVID-19 Delta variant demonstrates a high

transmissible rate, approximately 225% and coupled with flu season just around the corner, we can be facing continued strain in our healthcare systems in the US.¹ If we are not able to see a reduction in COVID-19 cases, mitigation strategies may be indicated.

COVID-19 symptoms tend to peak later and last longer than the flu, with a median time of 12 days compared to 7.⁵ COVID-19 surges are more pronounced in low vaccination areas becoming a pandemic of the unvaccinated (Aubrey & Simmons-Duffin, 2021). What can we do to protect ourselves as we prepare for a surge in COVID-19 cases and influenza season? Many states are even considering re-implementing mask mandates and reducing indoor gatherings. The most effective ways of preventing the spread of diseases are to continue to physically distance, hand wash, and mask.

Jasmiry Bennett, Editor-in-Chief

References

1. Aubrey, A. & Simmons-Duffin, S. (2021, July 17). With the delta variant spreading fast, is it time to mask up again? <https://www.npr.org/sections/health-shots/2021/07/17/1017075240/delta-variant-is-spreading-fast-and-new-cases-are-rising-is-time-to-mask-up-again?fbclid=IwAR27CzB72Zx3o18uqKWgoq6H7UL3xyXdHLya02IllyQSKBuMoo71C-5XZPA>
2. Centers for Disease Control and Prevention (CDC). (2020, October 1). *Past seasons estimated influenza disease burden*. Retrieved on July 17, 2021 from <https://www.cdc.gov/flu/about/burden/past-seasons.html>
3. Lutz R. How deadly was the 2019-2020 flu season? *ContagionLive: Infectious Diseases Live*. 2020. Retrieved on July 17, 2021 from. <https://www.contagionlive.com/view/how-deadly-was-the-2019-2020-flu-season>
4. Rodriguez A, Muraludhar N, Adhikari B, Tabassum A, Ramakrishnan N, Aditya-Prakash B. Sterring a historical disease forecasting model under a pandemic: Case of flu and COVID-19. *Association for the Advancement of Artificial Intelligence*. 2020. Retrieved on July 17, 2021 from. <https://arxiv.org/pdf/2009.11407.pdf>
5. Shapiro A, Marinsek N, Clay I, Wang Y, Althoff T, Foschini L. Characterizing COVID-19 and influenza illness in real world via person generated health data. *Patterns*. 2021(2):10018. Retrieved on July 17, 2021 from. <https://reader.elsevier.com/reader/sd/pii/S2666389920302580?token=37AA14E400F6DFA4D752E4932B959713A90B026FDF03F39C42EBC31F4665EA2FF4AB57B92056E8C4ECB372A5BC48B420&originRegion=us-east-1&originCreation=20210718034958>