Vaccination Exemptions for School-Aged Children in Delaware

Anna Melnick, MPH  
*Thomas Jefferson University*

Meghan Gannon, PhD  
*Thomas Jefferson University*

Follow this and additional works at: https://jdc.jefferson.edu/si_hs_2022_phase1

Part of the Pediatrics Commons

Let us know how access to this document benefits you

Recommended Citation

https://jdc.jefferson.edu/si_hs_2022_phase1/9

This Article is brought to you for free and open access by the Jefferson Digital Commons. The Jefferson Digital Commons is a service of Thomas Jefferson University's [Center for Teaching and Learning (CTL)](https://ctl.jefferson.edu). The Commons is a showcase for Jefferson books and journals, peer-reviewed scholarly publications, unique historical collections from the University archives, and teaching tools. The Jefferson Digital Commons allows researchers and interested readers anywhere in the world to learn about and keep up to date with Jefferson scholarship. This article has been accepted for inclusion in Phase 1 by an authorized administrator of the Jefferson Digital Commons. For more information, please contact: JeffersonDigitalCommons@jefferson.edu.
Vaccination Exemptions for School-Aged Children in Delaware

Anna Melnick, MPH, Meghan Gannon, PhD

Abstract

Background: Current awareness around childhood vaccinations and associated requirements for school entry has been heightened both nationally and internationally as governments work to find a balance between protecting their residents’ health and personal freedoms. Scant research exists examining the characteristics of these vaccine exemptors, but as the percentage of students seeking these exemptions increases yearly, this yields an opportunity to identify trends and inform future policy.

Question: What are the associations between reason for exemption from mandated vaccinations and the demographics of race and gender for school-aged children in the state of Delaware?

Results: Drawing from school nurse vaccine exemption record data, we looked at student’s reason for vaccine exemption and used chi square analyses to study the association with race, disease(s) of vaccine, and gender. White race and male gender were significantly associated with having a religious vaccine exemption, $X^2 (1, N = 154) = 22.75, p = .000$ and $X^2 (1, N = 154) = 8.71, p = .003$, respectively. The varicella vaccine was the most common disease when the reason for exemption was having had the disease, while the Tdap vaccine was the most common vaccine exemption for religious reasons.

Conclusion: The significant association of white race and religious vaccination exemptions implicates future policy that focuses on this proportion of exemptions, rather than prior exposure exemptions that do not impact herd immunity. While data was available for only one school district within the state of Delaware, the significance of the findings suggests further and broader inquiry is imperative in the on-going efforts to keep our populations safe from vaccine preventable diseases.