In this issue of the journal, Stadlin et al report that, although the rates of medical exemptions to school immunization requirements are rather modest, easier processes for offering medical exemptions were associated with higher rates of medical exemptions [1]. This finding is consistent with previous studies that found that the ease of obtaining nonmedical religious or philosophical exemptions was associated with higher rates of exemptions [2, 3]. Interestingly, states with more difficult procedures for nonmedical exemptions had higher rates of medical exemptions, suggesting that some parents may be opting for medical exemptions when it is difficult to obtain nonmedical exemptions. This observation is consistent with our unpublished observation that many of the reasons parents reported as medical exemptions for vaccines were not consistent with the recommendations of the Advisory Committee on Immunization Practices.

Nonmedical exemptions can compromise efforts to control or eliminate vaccine-preventable diseases, but they recognize the role of parental autonomy in making some medical decisions for their children [4]. Medical exemptions are intended to prevent adverse events in children who are at increased risk of adverse events because of underlying conditions. Many of these underlying conditions also place children at increased risk of complications from infectious diseases. Children with valid medical exemptions need to be protected from exposure to vaccine-preventable diseases by insuring high coverage rates among the rest of the population. Granting medical exemptions for invalid medical contraindications may promote unfounded vaccine safety concerns. Although states may wish to allow parents who make decisions based on poor science or perceptions to withhold vaccines from their children, these exemptions should be distinguished from valid medical exemptions.

Stadlin et al also found that rates of medical exemptions were higher in states that allowed permanent rather than temporary exemptions. Because medical contraindications may change, children with medical exemptions should be reviewed periodically. For example, egg allergy was considered to be a contraindication to receipt of influenza vaccines for many years, but changes in vaccine production have resulted in lower amounts of egg protein in vaccines, and abundant evidence has been generated showing that most children with egg allergy can safely receive influenza vaccines [5].

During the 7-year study period examined by Stadlin et al, 0.26%-0.41% of children enrolled in school received a medical exemption. This very small proportion of new school entrants translates into 11 000-13 000 medical exemptions at school entry (kindergarten) for a total of >87 000 children with medical exemptions over a 7-year period. Because not all vaccinated children respond to the vaccines they receive, the true number of susceptible children is undoubtedly higher, and there are a large number of children susceptible to ≥1 vaccine-preventable diseases. Also, geographic or social clustering of unvaccinated children contributes to the risk of contracting and spreading disease, [6].

Stadlin et al have brought attention to the issue of medical exemptions from school immunization requirements and the association of rates of medical exemptions with the ease of obtaining such exemptions. This information should be useful to state and local immunization program personnel responsible for implementing and enforcing school immunization requirements. In addition, healthcare providers should be made aware of the consequences of providing false contraindications for vaccines as a justification for not vaccinating children, and providers should adhere to recommendations from the Centers for Disease Control and Prevention, the American Academy of Pediatrics, and the American Academy of Family Physicians.
Note

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