

## **10. Vaccination Records**

### **Records of Healthcare Providers**

Appropriate and timely vaccination documentation helps ensure not only that persons in need of recommended vaccine doses receive them but also that adequately vaccinated patients do not receive excess doses. Curtailing the number of excess doses administered to patients controls costs incurred by patients, providers, insurers, vaccination programs, and other stakeholders. In addition, avoidance of excess doses of vaccines should decrease the number of adverse reactions to vaccines. Health care providers who administer vaccines covered by the National Vaccine Injury Compensation Program (VICP) are required under the National Childhood Vaccine Injury Act (1) to ensure that the permanent medical record of the recipient (or a permanent office log or file) indicates the date the vaccine was administered, the vaccine manufacturer, the vaccine lot number, and the name, address, and title of the person administering the vaccine. This Act applies to any vaccine for which there is a routine recommendation for childhood vaccination, even if many or most doses of the vaccine are administered to adults (e.g., influenza vaccine). In addition, the provider is required to record the edition date of the VIS distributed and the date those materials were provided. The Act considers a health-care provider to be any licensed health care professional, organization, or institution, whether private or public (including federal, state, and local departments and agencies), under whose authority a specified vaccine is administered. This information should be kept for all vaccines, not just for those required by the Act. Providers and staff members also should systematically update patients' permanent medical records to reflect any documented episodes of adverse events after vaccination and any serologic test results related to vaccine-preventable diseases (e.g., those for rubella screening and anti-HBs).

### **Personal Records of Patients**

Official childhood vaccination records have been adopted by every state and territory and the District of Columbia to encourage uniformity of records and to facilitate assessment of vaccination status by schools and child-care centers.

The records also are key tools in vaccination education programs aimed at increasing parental and patient awareness of the need for vaccines. This record can exist in electronic file format or in hardcopy format. A permanent vaccination record should be established for each newborn infant and maintained by the parent or guardian. The parent or guardian should be educated about the importance of keeping the record up-to-date and instructed to keep the record indefinitely. These records should be distributed to new parents and/or guardians before discharge from the hospital or birthing center. Using vaccination records for adolescents and adults also is encouraged. Standardized adult vaccination records are available at <http://www.immunize.org>.

## **Immunization Information Systems (IISs)**

IISs (formerly referred to as immunization registries) are confidential, population-based, computerized information systems that collect and consolidate vaccination data from multiple health care providers within a geographic area. IISs are a critical tool that can increase and sustain vaccination coverage by consolidating vaccination records from multiple providers, generating reminder and recall vaccination notices for each person, and providing official vaccination forms and vaccination coverage assessments (2). Providers should be aware of state and/or regional IISs and requirements for reporting.

Changing vaccination providers during the course of an individual's vaccination series is common in the United States. In addition to changes in providers, the vaccination records of persons who have changed vaccination providers often are unavailable or incomplete or might not have been entered into an IIS (2). Missing or inaccurate information regarding vaccines received previously might preclude accurate determination of which vaccines are indicated at the time of a visit, resulting in administration of extra doses.

A fully operational IIS also can prevent duplicate vaccinations, forecast when the next dose is due, limit missed appointments, allow recall for those who missed appointments, determine when vaccines need to be repeated (the technical IIS term for this is "evaluation"), reduce vaccine waste, and reduce staff time required to produce or locate vaccination records or certificates.

Most IISs have additional capabilities, such as measurement of vaccination update and coverage, aid in tracking vaccine inventory and placing vaccine orders, recall of vaccine by lot number, maintenance of lifetime vaccination histories, and interoperability with other health information systems. The National Vaccine Advisory Committee recommends that vaccination providers participate in these systems when possible. Electronic health records should maintain interoperability with IISs as part of an effort to improve the quality of care, reduce health disparities, engage patients and families in their health, improve the coordination of care, improve population health, and ensure adequate privacy and security protection for personal health information (see [www.cdc.gov/ehrmeaningfuluse/introduction.html](http://www.cdc.gov/ehrmeaningfuluse/introduction.html))

One of the national Healthy People objectives for 2020 is 95% participation of children aged <6 years in a fully operational population-based IIS (objective 20.1) (3,4). Participating in an IIS means having two or more vaccinations recorded in the IIS. 2012 IIS data indicate that approximately 86% of children aged <6 years with two or more vaccinations were participating in IISs (4,5).

The National Vaccine Advisory Committee recommends that public health departments work toward including adults in all state IISs, reduce barriers to including adult vaccination records in IISs, and ensure that IISs meet new standards of EHR interoperability to track and maintain adult vaccination records (6).

Nationally, 57.8 million U.S. adults aged 19 years or older participated in an IIS in 2012 (4). This number reflects adults who may have had childhood vaccines entered during childhood and now have aged to adults. In 2013, 32% of U.S. adults had a record in the IIS and at least one vaccination administered during adulthood.

## REFERENCES

1. National Childhood Vaccine Injury Act, 42 U.S.C. Sect. 300aa-1 to 300aa-34 (1986).
2. CDC. Immunization information systems progress—United States, 2006. *MMWR Morb Mortal Wkly Rep.* 2008;57(11):289-291.
3. US Department of Health and Human Services. Immunization and infectious diseases. *Healthy people 2010*. Vol 1 (conference edition). 1st ed. Washington, DC: US Government Printing Office; 2000.
4. CDC. Progress in immunization information systems - United States, 2012. *MMWR Morb Mortal Wkly Rep.* 2013;62(49):1005-1008.
5. Mangione-Smith R, DeCristofaro AH, Setodji CM, et al. The quality of ambulatory care delivered to children in the United States. *N Engl J Med.* 2007;357(15):1515-1523. DOI: 10.1056/NEJMsao64637
6. National Vaccine Advisory Committee. Recommendations from the National Vaccine Advisory committee: standards for adult immunization practice. *Public Health Rep.* 2014;129(2):115-123.