

# Patient-Held Records Improve Vaccination Rates

BY PATRICE WENDLING  
Chicago Bureau

**P**atient-held vaccination records were associated with improved childhood immunization rates in an analysis of National Immunization Survey data.

The rate of up-to-date vaccinations was 84% for children with a patient-held vaccination record and 77% for those without one.

Dr. James T. McElligott, who reported

the findings at the American Federation for Medical Research Southern Regional meeting in New Orleans, said that having a patient-held vaccination record was associated with a 54% increase in the odds of being up to date on immunizations, even after controlling for race/ethnicity, maternal education, poverty level, language, number of children in the home, and number of vaccine providers as part of a multivariate logistic regression analysis.

The National Vaccine Advisory Committee's Standards for Child and Adolescent Immunization Practices recommend handheld records that document each vaccine received, including the date and the name of the health care professional who administered the vaccine.

The impact of these cards on immunization rates, however, has been largely undefined.

"A significant obstacle to the use of the shot card is the perception of its usefulness," Dr. McElligott explained in an interview. "By encouraging families to keep track of their child's records and be involved in their health care, we can potentially make a significant improvement in vaccination rates," he said.

For the study, data were analyzed from 60,605 children in the 2004-2006 National Immunization Survey of households with children 19-35 months of age.

The data were statistically weighted to represent nearly 6 million children, Dr. McElligott said.

A provider record of being up to date on immunizations was defined as four diphtheria toxoid, tetanus toxoid, and acellular pertussis vaccinations; three polio; one measles; three *Haemophilus influenzae* type B; and three hepatitis B vaccinations.

Overall, 81% of the weighted sample, or roughly 4.8 million children, were up to date on vaccinations and 41% or 2.4

**'By encouraging families to keep track of their child's records and be involved ... we can potentially make a significant improvement in vaccination rates.'**

million children had a vaccination card, according to Dr. McElligott and his coinvestigator Dr. Paul Darden, who are both with the department of pediatrics at the Medical University of South Carolina in Charleston.

Patient-held records appeared to be most useful when children had multiple vaccine providers, immunization rates of 83% vs. 72% for those without hand-held patient records, when children had mothers with low educational levels (82% vs. 73%), and when children lived in households with four or more children (76% vs. 70%).

All of the differences were statistically significant  $P < .01$  and were seen across all ages.

For those below the poverty line, having a patient-held vaccination card improved the up-to-date vaccination status from 78% to 84%.

For those above the poverty line, it improved the rate from 81% to 88%, Dr. McElligott reported.

Most, if not all, of the children in South Carolina are provided with a vaccination card at birth, but keeping those cards up to date can be a challenge, explained Dr. McElligott, who acknowledged that their use is inconsistent even in his own practice.

It is hoped that the findings of this study will encourage greater use of the cards as part of an overall plan that incorporates other simple, validated means of improving vaccination rates in physicians' practices.

The study was supported by the Agency for Health Care Research and Quality National Research Service Award fellowship, and the Department of Health and Human Services.

The investigators had no personal disclosures to make. ■



AVAILABLE  
AT DRUGSTORES  
NATIONWIDE

## Face it: Eucerin reduces the red

Address facial redness with one regimen clinically proven to **cleanse, moisturize, and fight aging**

- Fortified with natural Licochalcone to help soothe irritated skin
- Provides immediate redness relief and improves the condition of visibly red skin in just 4 weeks



Before concealing product application

After concealing product application



CLEANSE

MOISTURIZE

FIGHT AGING

- Fragrance-free • Non-comedogenic • Non-acnegenic
- Safe for sensitive skin • Non-irritating

**Eucerin**<sup>®</sup>