

- [McCavit, Gilbert, and Buchanan \(2013\)](#) conducted a cross-sectional electronic survey of 106 pediatric hematologists with expertise in SCD regarding their practices related to penicillin prophylaxis in children with SCD after 5 years old. Eighty-four percent of pediatric hematologist from 76 centers completed the survey, and 76% routinely recommended cessation of penicillin prophylaxis after 5 years old.

Apply the Evidence: Nursing Implications

There is **good evidence** with a **strong recommendation** ([Guyatt, Oxman, Vist, et al, 2008](#)) that penicillin prophylaxis significantly reduces the risk of pneumococcal infection in children with SCA. The epidemiologic studies strongly suggest that all children with SCA should be started on prophylactic penicillin at 2 months old. Parents and children with SCA should be instructed in the importance of taking the prophylactic penicillin twice daily and seeking medical attention immediately for acute illness, especially if the temperature exceeds 38.3° C (101° F), regardless of the use of prophylaxis.

Quality and Safety Competencies: Evidence-Based Practice*

Knowledge

Differentiate clinical opinion from research and evidence-based summaries.

Summarize the epidemiologic studies that strongly suggest that children with SCA should be started on prophylactic penicillin.

Skills

Base individualized care plan on patient values, clinical expertise, and evidence.

Integrate evidence into practice by making sure infants with SCD are started on penicillin at 2 months old.

Attitudes