

**Epidemiology/Genetics Abstracts**

**Title:** LATEX ALLERGY PRECAUTIONS IN CHILDREN WITH SPINA BIFIDA RECEIVING CHILDHOOD IMMUNIZATIONS EDUCATION: A COMMUNITY HEALTHCARE PROVIDERS SURVEY

**Presenting Author:** Suzanne Fortuna, Pediatric Orthopaedic Surgery, Rainbow Babies and Children's Hospital/University Hospitals Case Medical Center

**Additional Authors:**

- Jennifer Diluciano, Pediatric Orthopaedic Surgery, Rainbow Babies and Children's Hospital/University Hospitals Case Medical Center
- Allison Gilmore, Pediatric Orthopaedic Surgery, Rainbow Babies and Children's Hospital/University Hospitals Case Medical Center

**Background:** In clinical practice over the years, I have found it increasingly frustrating to educate patients and families about latex allergy precautions in the newborn period. One of the disparities is in regards to childhood immunizations because the primary healthcare providers (PCP's) in the medical community have not embraced this vital education continuum. Often families clearly understand that precautions mean avoidance but one pediatrician contacted me stating: "I have not had any reactions in many years so I will continue to administer immunizations to this population without concern of latex exposure." One family in dealing with a nurse practitioner and health dept was told continueing to hold off on immunizations until we decide to pay for special medication vials is not an option and to seek care elsewhere. One family was even told to bring her own latex free gloves for the doctor's office to use when caring for her child. In reviewing the literature concerning latex containing immunization vials, one reference still states that "If a person reports a severe (anaphylactic) allergy to latex, vaccines supplied in vials or syringes that contain natural rubber should not be administered, unless the benefit of vaccination outweighs the risk of an allergic reaction to the vaccine. For latex allergies other than anaphylactic allergies (e.g., a history of contact allergy to latex gloves), vaccines supplied in vials or syringes that contain dry natural rubber or rubber latex can be administered." The ALAA(American Latex Allergy Association) and AAAAI (American Academy of Allergy Asthma, and Immunology) have resources about latex allergy and latex allergy management in the outpatient practices available. Yet, what about repeated exposure could incite the beginning of a latex sensitivity and no one mentions emergency care on hand in the community offices? What about informed consent? Are families informed of this risk? I have not heard in practice special measures being used for the at risk populations especially individuals affected with spina bifida. I am concerned that we are undereducating providers, patients, and families. In attending the national conference on Spina Bifida, SBAA, each year, caregivers, patients, and families attend the lecture about latex allergies and questions arise each year about this sensitive but important subject. The significance of the study would be to determine the level of understanding about latex allergy, sensitivity, and precautions by the healthcare community and persons affected by spina bifida in relationship to administration of childhood immunizations. Are the communities documenting and informing patients and families of the risks of exposure or offering a choice for a safe alternative to the latex containing medication vials found in some immunizations? How can we, as spina bifida educators and advocates, spread the word about latex precautions to the community in a concise and consistent manner to maintain the best evidenced based practice care.

**Method:** The setting is a CNP in the dept of pediatric orthopaedics in large tertiary hospital conducts electronic and mailed survey to community based physicians in the Cleveland area. Inclusion criteria is healthcare community provider (MD, CNP, PA, LISW, therapist, etc) caring for at least one patient with diagnosis of spina bifida, hydrocephalus or neurogenic bladder (diagnoses consistent with high risk

**Epidemiology/Genetics Abstracts**

group of developing latex allergy). . All community based providers who treat families with child affected by SB will be included. Exclusion criteria those who chose not to participate via electronic survey will not return the request to participate. Otherwise no exclusion criteria. Recruitment for PCP's via hospital list mass mailing and e-mail list. Estimated total participants involved: contact 1,000-2,000 community PCP's via e-mail or mail. Conduct an electronic survey of latex allergy education to community based healthcare providers caring for persons affected by spina bifida and mail form vs. electronic option. Use electronic survey from company such as survey monkey and printable equivalent to mail out. Plan expand to multisite if success through initial trial. Plan to expand to patients and families to get idea of their educational level of understanding about latex allergy precautions and how it is affected by administration of childhood vaccinations.

Specifically, the information that will be collected for each participant includes: identification of individual as healthcare provider caring for person (s) affected with spina bifida, age, gender, questions about latex education, immunization awareness concerning latex precautions, etc. Accessed through hospital based e-mail or contact list of providers and community providers. Time allotment approximately 1-3 months for recruitment and data collection. Suzanne M. Fortuna, CNS, FNP will have adequate time to devote to the completion of the project and is fully aware of the the protocol and research related duties and functions. Funding not necessary at this time except for postage and printing of survey through dept appropriated funds.

**Results:** Development of practice based evidence to support continueing education concerning latex allergy precautions and the administration of childhood immunizations to insure safe, consistent care across the lifespan by community healthcare providers to persons affected by spina bifida. Anticipated results to support practice-based care of children with SB in administration of childhood immunizations.

**Conclusion:** Anticipate data collection to begin with IRB approval submission date mid November.