

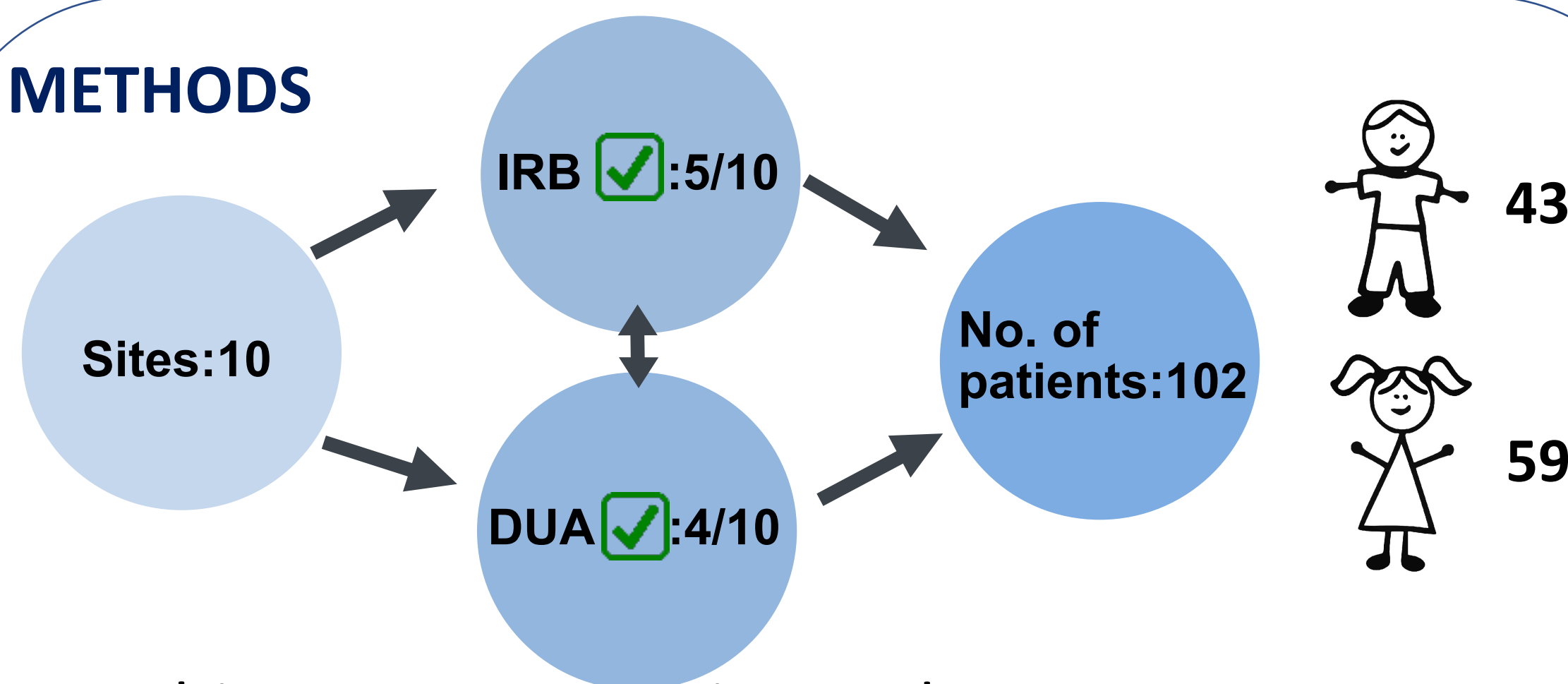
North American Prospective Pediatric Allergic Contact Dermatitis Registry

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INTRO

- True incidence of allergic contact dermatitis (ACD) in children is unknown.
- Prevalence of contact sensitization varies with respect to age, sex, and geographic location and evolves over time.
- Multi-center studies allows for accrual of geographically diverse and large number of patients.

METHODS



- Multi-center prospective study
- Children <18 yo from Feb 2018 to Jan 2020
- Data collection: Demographics, medical history, patch-testing results, and logistical information of patch-testing technique

RESULTS

| One or more (+) reaction                 | No. of children (%) |
|--|---------------------|
| All (n=102)                              | 82 (80.3)           |
| History of atopic dermatitis (AD) (n=71) | 57 (80.3)           |
| Non-AD (n=31)                            | 25 (80.6)           |

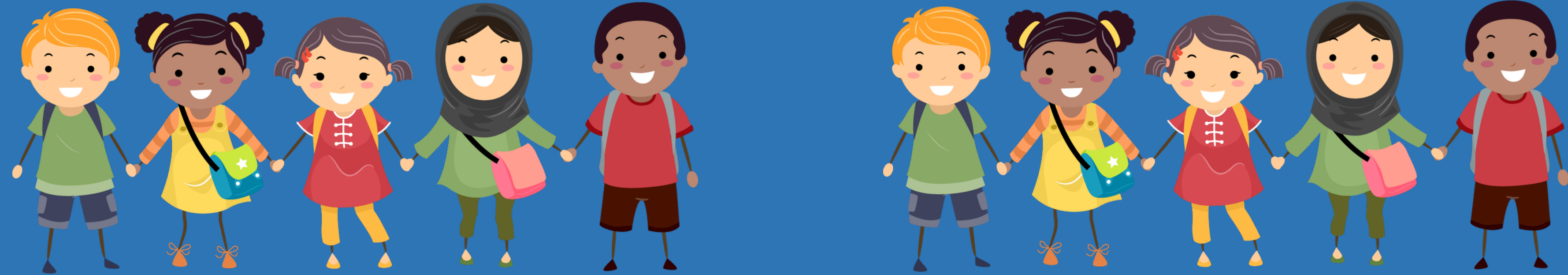
\*P=0.97 AD vs. non-AD

| Allergens                      | No. of children (%) |
|--------------------------------|---------------------|
| Nickel sulfate                 | 18 (17.6)           |
| Cobalt chloride                | 17 (16.7)           |
| Methyisothiazinolone (MI)      | 15 (14.7)           |
| Hydroperoxides of Linalool     | 12 (11.8)           |
| Methylchloroisothiazolinone/MI | 12 (11.8)           |

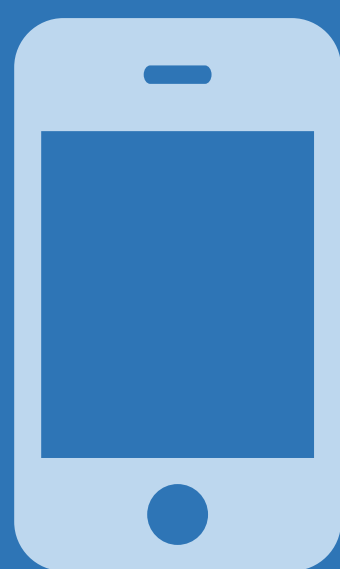
DISCUSSION

- This is the first national prospective database of pediatric ACD in North America.
- We seek to create the most comprehensive and accurate collection of pediatric ACD cases which can improve our understanding of this condition in children.

Metals, preservatives, and fragrances are top allergens in children.



More collaboration and sites are needed to improve our understanding of allergic contact dermatitis in children.



“I am interested to participate!”  
Scan here with your smart phone’s camera to *sign up!*

OTHER RESULTS



Collaborating sites:

1. Massachusetts General Hospital
2. Brigham and Women’s Hospital
3. University of Missouri
4. Emory University
5. Stanford University
6. Washington University in St. Louis
7. University of Wisconsin
8. Texas Children’s Hospital
9. Northwestern University
10. Medical College of South Carolina

● IRB approved  
● IRB pending  
● Coordinating center

| Characteristics   | No. Children (%) |
|---|------------------|
| Age at patch testing, mean ± SD                               | 9.0 ± 4.8        |
| Sex   |                  |
| Boys  | 43 (42.2)        |
| Girls   | 59 (57.8)        |
| Race  |                  |
| White   | 82 (80.4)        |
| Black   | 8 (7.8)          |
| Asian   | 6 (5.9)          |
| Other   | 6 (5.9)          |
| Ethnicity   |                  |
| Non-Hispanic  | 95 (93.1)        |
| Hispanic  | 5 (4.9)          |
| Average number of allergens patch tested per child, mean ± SD | 97.7 ± 38.7      |
| History of AD   | 71 (69.6)        |
| Location of dermatitis  |                  |
| Generalized   | 24 (23.5)        |
| Scalp   | 3 (2.9)          |
| Eyelid  | 7 (6.9)          |
| Perioral  | 7 (6.9)          |
| Periorbital   | 6 (5.9)          |
| Facial  | 48 (47.1)        |
| Neck  | 14 (13.7)        |
| Chest   | 7 (6.9)          |
| Abdomen   | 7 (6.9)          |
| Back  | 13 (12.7)        |
| Hands   | 24 (23.5)        |
| Arms  | 31 (30.4)        |
| Legs  | 23 (22.5)        |
| Buttocks  | 6 (5.9)          |
| Feet  | 12 (11.8)        |
| Treatment at time of patch testing                            |                  |
| Topical corticosteroids                                       | 82 (80.4)        |
| Topical calcineurin inhibitor                                 | 27 (26.5)        |
| Crisaborole   | 5 (4.9)          |
| Systemic immunosuppressant                                    | 21 (20.6)        |
| None  | 16 (15.7)        |



School of Medicine

