Public Health Research in Pima County Schools

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Educational Objectives

• Participants will be able to describe two ongoing research projects in Pima County.

• Participants will be able to identify individuals at the University of Arizona who can assist them in evaluating school based programs.
Previous School Based Programs

• Asthma Management Program in Schools (NIH/NHLBI)
  – Birmingham City Schools 1995 – 2000

• Validation of an Asthma Case Detection Program (NIH/NHLBI)
  – Bessemer, Midfield, Fairfield, Tarrant Schools 2000 – 2003

• Asthma Agents Educational Program (Blue Cross/Blue Shield, AL)
  – Midfield and Tarrant Schools 2002 – 2003

• Supervised Asthma Therapy Program (NIH/NHLBI)
  – Birmingham, Bessemer, Jefferson County, Midfield, Tarrant 2004 – 2007

• Effect of a School Based Hand Sanitizer Program on Asthma (NIH/NHLBI)
Current School Based Projects

• Cost-Effectiveness of a School Based Asthma Therapy (NIH/NHLBI; Merck/Thayer)

• Implementation and Evaluation of a Stock Albuterol Policy (Sundt Foundation)

• Girls Club (HRSA/MCH; MEZCOPH)
  – Marana Unified School District 2013-2014
Supervised Asthma Medicine in School (SAMS)

• Adherence to daily controller medication is low
  – Most reports indicate rates of less than 50%
    • Lowest rates are among inner-city and minority populations
    • Rates are lowest in the elementary school age as compared to preschoolers and teenagers
  – Students with asthma are absent 2 more days than those without
    • Those with persistent asthma are absent even more often
  – 31% of illness absences in schools are related to asthma
Supervised Asthma Medicine in School (SAMS)

• Working with 20 elementary schools in TUSD

• Intervention implemented by the American Lung Association of Southern Arizona
  – Identifying children with previously diagnosed, but not well-controlled asthma
  – Ensuring guideline-concordant care in coordination with the child’s asthma care provider
  – Providing comprehensive asthma education
  – Monitoring asthma control over time
  – Providing ready access to quick relief medication at school
  – Providing direct supervision of daily controller therapy
Implementation and Evaluation of a Stock Albuterol Policy

- <15% of children have quick relief medication at school

- Barriers
  - Children with asthma not known to the school
  - Difficulty obtaining asthma action plans from provider
  - Difficulty obtaining 2nd inhaler for school

*JK Gerald et al. (2012). Pediatric Allergy, Asthma, and Immunology*
Implementation and Evaluation of a Stock Albuterol Policy

• Create policies for stock inhalers
  – 12% of schools have a stock albuterol inhaler
    • Reduce 911 calls for asthma
    • Decrease number of children sent home
  – Worked with SUSD to develop, implement and evaluate a policy with standing orders for administration of albuterol
Implementation and Evaluation of a Stock Albuterol Policy

• Preliminary Results
  – Job stress relief for nurses
  – Tool for immediate relief to relieve panic in children
  – Standardized, complete action plan
    • Fills gaps in communication from doctors (Asthma Action Plan)
    • More follow-up than most Asthma Action Plans (going beyond 2 puffs)
  – Tool to demonstrate to parents the benefit of having quick-relief inhalers at school
  – Ease in carrying the one stock inhaler and a few disposable mouthpieces during fire drills rather than loading up a cart of up to 50 inhalers
Girls Club

• Improve relationships among girls that result in less relational aggression
  – Distinct form of bullying that is more common among girls than boys
  – Covert and often unrecognized by adults
  – Girls may appear to be friends
  – Aggressors may seem friendly, respectful, “good” girls
  – Behaviors – dirty looks, sudden exclusion, ignoring, social media posts, rumors, secrets
  – Reactions – uncertainty, panic, terror, isolation, loss, self-doubt

• Worked with Estes Elementary school in the MUSD

• Adapted Go Grrrls evidence-based intervention
  – 22 weeks, after school, once a week, 2 hours
  – University field trip
Girls Club

- Statistically significant improvement in coping skills, family relationships and weight perceptions

- No statistically significant changes
  - Self-esteem, assertiveness, peer esteem, self-efficacy
    - Measures may not adequately capture the outcome
    - May not have enough statistical power to detect difference
Girls Club

Self confidence

“She has gotten to the point that she won’t subject herself to mean girls. She’s pursuing interests that are ‘off the beaten path’, but that bring her joy - what we call private moments of control.”

Gender Roles

“Because of Girls Club lessons, [my daughter] censors the commercials at home and engages me in conversations about why society allows women to be portrayed in a negative and powerless light.”