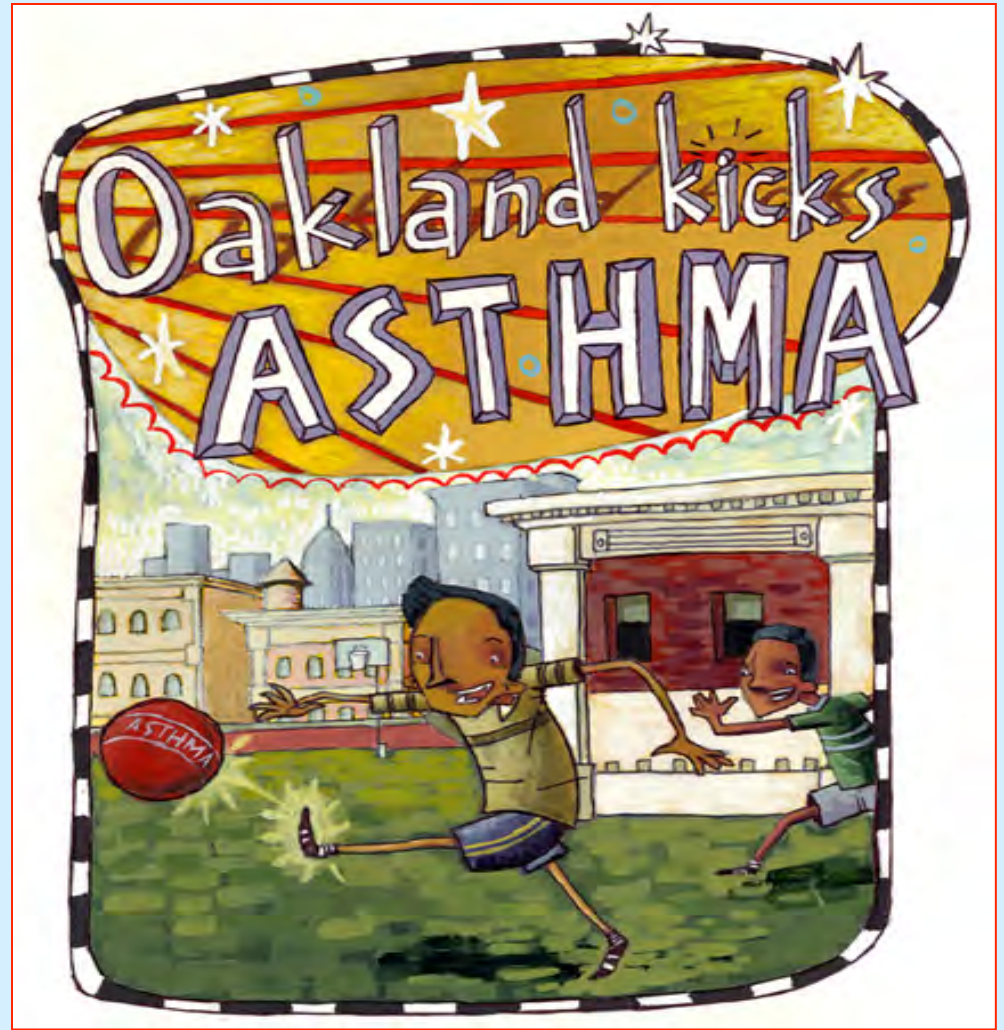


Oakland Kicks Asthma ©



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INTRODUCTION

- **Oakland among highest poverty & asthma rates in the US**
- **Adolescents (11-18) have poorest med compliance**
- **School-based, group education**
 - most cost-effective for large scale intervention**
- **No identification of students with asthma in OUSD**
- **No asthma curriculum oriented to urban youth this age**
- **Goal: Develop, implement, and evaluate a large scale case identification and education program for children with asthma in Oakland Public Schools**

METHODOLOGY

12 question case identification survey

Developed asthma curriculum – Kickin' Asthma

Based on Open Airways for Schools

Adapted to be age appropriate

Involved students in development

Implemented in middle and high schools

Lunch classes - middle school best

Ensure participation – interactive, videos, games

Evaluation

Before

Immediately after

3 months post

SUMMARY OF RESULTS

**92% target population surveyed and classified
680 students participated in at least 3 of 4 asthma
education classes (64% of those invited)**

Follow up 3 months after classes:

- Quick-relief medications increased**
- Prevention medications increased**
- All 3 quality of life indicators significantly improved**
- Trips to emergency room was significantly reduced**
- 53% - less frequent day time asthma**
- 43% - less frequent night time symptoms**

QUALITY OF LIFE INDICATORS

Percent who report more frequent, less frequent, and no change for three quality of life indicators (N=213)

Outcome	School Absences (n=213)	Nights Sleep Disturbed (n=211)	Days of Activity Limitation (n=209)
Less frequently	25%	42%	50%
No change	61%	38%	25%
More frequently	14%	20%	25%
Average Pre	.93	2.00	2.77
Average Post (3 mo.)	.57	1.34	2.30

MEDICATIONS

Number of students using medications correctly prior to and 3 months after the end of the intervention

Quick Relief ¹		Prevention ²	
Pre (n=448)	3 Month f/u (n=224)	Pre (n=448)	3 Month f/u (n=224)
260 (58%)	152 (68%)	112 (25%)	81 (36%)

¹ Chi square = 6.07 (1 df)

$p < .025$

² Chi square = 9.06 (1 df)

$p < .01$

ACUTE CARE OUTCOMES

Emergency Room Visits and Urgent Care Visits Decreased, Increased, or Stayed the Same 3 months After the Intervention Versus Before

Outcome	Emergency room past 3 months (n=209)	Urgent doctor visits past 3 months (n=208)
Less frequent	59 (28%)	90 (43%)
Same	132 (63%)	48 (23%)
More frequent	19 (9%)	37 (34%)
Average Pre	1.8	2.7
Average 3 mo	0.4	1.0

NEED FOR FOLLOW UP

Problems Identified

Students

- **with persistent asthma not using controller medications**
- **using reliever medications as controllers and vice versa**
- **ran out of medications or meds expired**
- **with symptoms not using reliever medications**
- **did not have medications at school**
- **not using spacers**
- **did not have an Asthma Action Plan**

Families

- **did not prioritize medications**

CONCLUSIONS

- **Secondary schools are an effective venue for identifying and recruiting youth with asthma for large scale public health interventions.**
- **School based education for youth in an urban school district with asthma can be successful at decreasing symptoms and improving health outcomes.**
- **Although medication practice improved over the course of the program, many students still did not use their medications properly.**
- **The parent or guardian of the child should be engaged to maximize the program's efficiency.**

SUSTAINABILITY POLICY DEVELOPMENT

- **Asthma Policy developed for District**
- **Identified School Nurse to coordinate asthma management and education in the District**
- **Enforced identification, intervention, education for students**
- **Enforced education for staff**

For Kickin' Asthma Curriculum

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QUESTIONS

Oakland Kicks Asthma

A hand-drawn illustration in black ink showing a person in a dynamic, kicking pose. The person's right leg is extended forward and upward, with the foot positioned as if about to kick a ball. The drawing is simple and sketchy, with visible lines for the body, limbs, and the ball.

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