

**Report on the Results of  
The Asthma Awareness Survey**

**Conducted by**



**for**

**The American Lung Association  
and the National Association of School Nurses**

**Submitted**

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# Table of Contents

<b>Executive Summary .....</b>	<b>1</b>
<b>Survey Findings .....</b>	<b>3</b>
School Nurses' Experience in Dealing with Students with Asthma .....	3
School Nurses' Perceptions Regarding Students with Asthma .....	3
School Nurses' Perceptions Regarding Asthma among Minority or Under-Served Populations.....	3
School Nurses and the Use of Rescue Inhalers .....	4
School Nurses' Observations Regarding Teachers/Staff and Students with Asthma.....	4
School Nurses' Observations Regarding Parents of Students with Asthma .....	4
School Nurses' Use of Programs to Teach about Asthma .....	4
School Nurses Look At How Their School System and Community Can Assist Students with Asthma .....	5
<b>Profile of School Nurses.....</b>	<b>5</b>
<b>Survey Methodology .....</b>	<b>5</b>

## Executive Summary

This executive summary highlights the results of a survey on asthma awareness among school nurses conducted by ORC Macro for the American Lung Association and the National Association of School Nurses:

- **School nurses are very experienced in dealing with asthma in the schools they work in.** Most say they have a great deal of experience in caring for students with asthma (mean of 4.3 on a 1 to 5 scale). In the past year, 63% have responded six or more times to a student having an acute asthma episode or attack, 32% responded one to five times, and only 4% did not have to respond at all.
- **School nurses perceive that asthma and its triggers are poorly understood by students, their parents and school staff.** Over 5 in 6 (85%) believe there are students with undiagnosed asthma in their schools. Over half (51%) think the level of asthma awareness among students with asthma is fair or poor. Over half (53%) regard the level of awareness of asthma triggers among school staff to be fair or poor. Over half (54%) regard the level of awareness of parents of how to manage their child's asthma to be fair or poor.
- **Asthma among students from minority or underserved populations is seen as an increasing problem by school nurses who serve these students.** Approximately one-third (32%) report that a majority of students with asthma in their schools are representative of minority or underserved populations such as Hispanic, African-American or Asian American. Forty percent of these school nurses see a great deal of increase in the amount of asthma in minority or underserved populations. Only 29% think that the resources in place to address health concerns among these students is sufficient.
- **School nurses observe that asthma among students causes significant difficulties in their schools.** A majority (51%) think asthma is more disruptive of school routine than other chronic diseases. Most think asthma has a fairly significant effect on school absenteeism (mean of 3.5 on 1 to 5 scale). Nearly half (46%) observe that not all students with asthma are able to participate in all school day activities, including gym and recess.
- **The possession of rescue inhalers by students with asthma is quite prevalent, but relatively few school nurses are authorized to carry and use rescue inhalers.** Seventy percent of school nurses report that students with asthma are allowed to carry a rescue inhaler with them at all times. Only 21% of school nurses have standing orders to carry and use a rescue inhaler in emergencies for students and staff.
- **School nurses use a variety of programs to teach students about asthma.** Most say that programs to teach students about asthma are plentiful (mean of 3.9 on a 1 to 5 scale). They most often use resources received from local hospitals and/or doctors (73%). Also frequently used are online programs (43%), in-school curriculums (33%), and resources received from the American Lung Association (26%).

- **School nurses see room for significant improvement in how their school system and community can assist students with asthma.** Only 40% give an excellent rating to their school system on making faculty and staff aware of students with asthma and how they should be assisted. Only 23% think a great deal is being done by the community and the school system to help students with asthma overcome feelings of isolation from other students who are able to participate in physical exercise and recess sessions. Large majorities endorse three ways of helping students with asthma to overcome feelings of isolation:
  - **84% favor** providing opportunities for students with asthma to express their feelings through their school assignments such as art and writing;
  - **76% favor** integrating physical exercise activities specific for students with asthma into the regular curriculum; and
  - **66% favor** instituting a “buddy” system or student club with rewards or other incentives to sensitize students to asthma as well as other relevant medical, social or cultural differences.

## Survey Findings

### School Nurses' Experience in Dealing with Students with Asthma

Most school nurses say they have a great deal of experience in caring for students with asthma (mean of 4.3 on a scale where 1 means very little experience and 5 means a great deal of experience).

During the past school year, 63% of school nurses responded six or more times to a student having an acute asthma episode or attack, 32% responded between one and five times, and only 4% did not have to respond at all.

### School Nurses' Perceptions Regarding Students with Asthma

School nurses are well positioned to observe the extent of asthma in schools and the effect of asthma on students' performance in school:

- Over five-sixths of school nurses (85%) believe there are students with undiagnosed asthma in their schools.
- School nurses think asthma has a significant effect on absenteeism (mean of 3.5 on a scale where 1 means not much at all and 5 means a great deal).
- In addition, a majority schools nurses (51%) think asthma is more disruptive of school routine than other chronic diseases, while only 11% think it's less disruptive and 38% think it is at the same level of disruption as other chronic diseases.
- Only about half of school nurses (53%) say that all students with asthma are able to participate in all school day activities, including gym and/or recess, and keep up with their peers. Nearly half (46%) say either that only some students can participate in all activities (44%) or most cannot participate in all activities (2%).
- Over half of school nurses (51%) think the level of asthma awareness among students with asthma is fair or poor. Only 19% think the level of awareness is excellent or very good, and 30% think it is just good.
- However, the extent to which asthma affects students' academic performance is thought be somewhat more modest (mean of 3.0 on a scale where 1 means to a minimal extent and 5 means to a great extent).

### School Nurses' Perceptions Regarding Asthma among Minority or Under-Served Populations

Overall, 32% of nurses (but a much higher 53% of nurses whose schools are in urban areas) report that the majority of students with asthma in their schools are representative of minority or under-served populations such as Hispanics, African-Americans or Asian Americans.

Among the nurses who report this to be the case, 40% see a great deal of increase in the amount of asthma in minority or underserved populations, 44% see some increase but not a lot, and 5% see not much increase.

Only 29% of these school nurses think that the resources in place to address health concerns in minority or under-served populations is quite sufficient, while 50% think the resources in place are only marginally adequate, and 20% think the resources are not adequate.

## **School Nurses and the Use of Rescue Inhalers**

Seventy percent of school nurses say that students with asthma are allowed to carry a rescue inhaler with them at all times in school. Where school nurses are responsible for a large number of students (2,000 or more) this percentage is much higher (81%). Where school nurses are responsible for a smaller number of students (500 or less) this percentage is much lower (52%).

Only one-fifth of school nurses (21%) have standing orders to carry and use a rescue inhaler in emergencies for students or staff. In this instance, where school nurses are responsible for a smaller number of students (500 or less) the percentage is much higher (37%), and where school nurses are responsible for a larger number of students (2,000 or more) the percentage is much lower (12%).

## **School Nurses' Observations Regarding Teachers/Staff and Students with Asthma**

School nurses regard the level of awareness of asthma triggers among school staff to be quite low: 53% regard the level of awareness to be fair or poor, 32% regard it to be good, and only 15% regard it to be very good or excellent.

Most school nurses (83%) say teachers and school staff are notified of students with asthma in their classes at regular intervals, 15% say they are notified occasionally, and 2% say they are not notified at all.

## **School Nurses' Observations Regarding Parents of Students with Asthma**

School nurses regard the level of awareness of parents of how to manage their children's asthma to be quite low: 54% regard the level of awareness to be fair or poor, 32% regard it to be good, and only 13% regard it to be very good or excellent.

Over half of school nurses (54%) say parents often update them on their child's asthma condition and medication regimen. However, a substantial number say parents rarely (43%) or never (1%) update them.

Over half of school nurses (57%) say parents are made aware of the school's policy that students with asthma are allowed to carry rescue inhalers at all times.

## **School Nurses' Use of Programs to Teach about Asthma**

School nurses think programs to teach students about asthma are relatively plentiful (mean of 3.9 on a scale where 1 means not available and 5 means very plentiful).

However, only 23% of nurses say they use these programs often, while 45% say they sometimes use these programs, 28% say they rarely use them, and 3% have never heard of such programs.

Among the types of programs school nurses use to help students, parents, faculty and staff assist students with asthma:

- 73% use resources received from local hospitals and/or doctors;
- 42% use online programs;
- 33% use in-school curriculums; and
- 26% use resources received from the American Lung Association.

## School Nurses Look At How Their School System and Community Can Assist Students with Asthma

Although school nurses overall rate their school system fairly well on making faculty and staff aware of students with asthma and how they should be assisted, there is still significant room for improvement: 40% give a rating of excellent or extremely good, 31% give a rating of good, 27% give a rating of fair, and 7% give a rating of poor.

Most school nurses think more can be done by the community and the school system to help students with asthma overcome feelings of isolation they might feel from other students who are able to participate in physical exercise and recess sessions: Currently 23% think a great deal is being done, 45% think something, but not a lot, is being done, and 24% think not much at all is being done.

Most nurses think each of three ways to reduce the possible feelings of isolation that students with asthma might feel would be helpful:

- 84% agree with providing opportunities for students with asthma to express their feelings through their school assignments such as art and writing;
- 76% agree with integrating physical exercise activities specific for students with asthma into the regular curriculum; and
- 66% agree with instituting a “buddy” system or student club with rewards or other incentives to sensitize students to asthma as well as other relevant medical, social or cultural differences.

## Profile of School Nurses

Among the school nurses who responded to the survey:

- **Gender** – 100% are women;
- **Length of time working as a school nurse** – 11 years or more (40%), 6 to 10 years (31%), 5 years or less (30%);
- **Age** – 39 and under (8%), 40 to 49 (33%), 50 and over (58%);
- **School setting** – Suburban (43%), Urban (27%), Rural (21%), Combination (9%);
- **Number of schools responsible for** – 1 to 3 (77%), 4 to 6 (14%), 7 to 10 (8%);
- **Number of students responsible for** – 500 or fewer (25%), 501 to 1,000 (33%), 1,001 to 2,000 (24%), more than 2,000 (17%).

## Survey Methodology

ORC Macro obtained names and addresses from the membership list of the National Association of School Nurses, and mailed postcards to a random selection of members, inviting them to participate in a survey about asthma awareness. Participants were given the option of calling an 800 number and completing the survey over the phone or going online and completing the survey on the web. In total, 300 interviews were completed between August 8 and August 25, 2003. A total of 131 interviews were conducted by telephone and 169 interviews were completed on the web.

Please note that the percentage responses to questions may not add up to 100% due to rounding to the nearest percent and/or not sure or refused responses.