

“No Idling” Initiative at 5-Star Child Care Facilities

August 13, 2009

Throughout 2008, “No Idling” signs were distributed to members and applicants of the Indiana Department of Environmental Management’s (IDEM) Five Star Environmental Recognition Program for Child Care Providers (5-Star Program). Educational materials and assistance was also provided. Child care providers receiving signs and assistance were surveyed and anecdotal data was gathered to help assess the results of this effort.

“No Idling” Signs

In the fall of 2007, Duke Energy awarded Improving Kids Environment (IKE) \$7,000 to purchase “No Idling” signs for child care providers applying for membership in the 5-Star Program. Child care facilities applying for membership in the 5-Star Program were provided free “No Idling” signs to place in parking lots and driveways. Approximately 150 signs have been distributed to date.

Surveys

Pre- and Post- Surveys were administered to members of the 5-Star Program (See Attachment A). Through the surveys, information was gathered related to the child care director’s general knowledge about vehicle idling prior to receiving information versus after receiving the educational materials. The surveys were also used to measure the estimated number of vehicles idling in parking lots prior to signs being posted versus after signs are posted. Finally, emission reductions occurring as a result of turning cars off while dropping off and picking up children as well as the number of children impacted by these changes were calculated. Changes in child care facility procedures about idling were also tracked.

Child Care Idling Knowledge

Child care providers were asked to classify their knowledge about environmental dangers with idling vehicles. They chose between the four levels listed below and definitions for each level were provided.



Sample “No Idling” Sign purchased with funding from Duke Energy.

	Prior to education about idling	After education about idling
Very Little Knowledge	0%	1%
Basic Knowledge	22%	11%
Fairly Knowledgeable	32%	11%
Very Knowledgeable	40%	68%

*Percentages do not add to 100% because some respondents left the question unanswered.

Education

In partnership with the Indiana State Department of Health Asthma Program, “10 Reasons Not to Idle” was printed and distributed to child care providers and parents. This eye-catching brochure focused on the truths about vehicle idling. It was designed to end misconceptions about engine idling and air emissions. Very popular among child care providers, more than 1,000 brochures were quickly distributed. Because funds were limited, the brochures ran out quickly and providers began distributing brochures only to “problem” parents as a tool to start a non-confrontational conversation about turning their cars off. The brochure is now available online at www.in.gov/isdh/files/Idling_Brochure.pdf. Members were also given additional reminders to provide parents and bus drivers about why the initiative is important and how they can help (Attachment B).



“No Idling” Sign posted at Sugar N’ Spice Day Care in Indianapolis.

Changes in Procedures

Child care providers were asked to select the types of procedures in place at the facility related to idling vehicles.

	Prior to education about idling	After education about idling
No policy or procedures in place	44%	0%
“No Idling” signs posted	4%	100%
Written policy for parents	6%	26%
Written policy and training for staff	0%	37%
Informational brochures about idling distributed to parents	Not measured	68%

*Prior to education, many facilities indicated they had no written policy about idling, but that they often verbally asked parents to turn off their vehicles, therefore they felt they had a procedure.

Measures/Results

Child care providers were asked to approximate the number of vehicles that idle at the facility on a typical day and for approximately how long they idle.

	Prior to “No Idling” Signage	After “No Idling” Signage
Average number of vehicles idling per facility per day	9.5	2
Average number of minutes each vehicle idled	4.5	3.8
Total average number of minutes of idling vehicles per facility per day	45	7
Number of seconds vehicles idled per child per day	47	7
Pounds of vehicle emissions per child per year	2.79	0.41
Average pounds of vehicle emissions per facility per year	152.42	25.57

Prior to placing the “No Idling” signs in the child care parking lots, facilities reported approximately 10 idling vehicles per day each idling for almost 5 minutes. The average total vehicle idling was approximately 45 minutes each day per facility.

After signs were installed and parents were educated about the “No Idling” policy, facilities reported the average total vehicle idling to be slightly more than 7 minutes each day per facility. This is an 84% reduction in vehicle idling.

Because the number of children (therefore cars) vary by facility, a fairer comparison for predicting emission reductions is based on vehicle emissions per child.

Prior to the signage, vehicles idled 47 seconds per child creating 2.79 lbs of vehicle emissions per child per year.

After signage was installed, vehicles idled 7 seconds per child creating 0.41 lbs of vehicle emissions per child per year. This is an 85% reduction in emissions.

Conclusion

After more than a year of outreach to over 50 child care facilities throughout Indiana, success was achieved through the “No Idling” Initiative to educate child care staff and parents about the environmental dangers of idling vehicles. The 50 child care facilities actively participating in the 5-Star Program during the “No Idling” initiative achieved a total estimated reduction in vehicles emissions of approximately 6,851 lbs each year (3.4 tons a year). A comparison of idling prior to the outreach versus after the outreach indicates an 84% reduction in vehicle idling and an 85% reduction in emissions. More than 2,500 children at these 50 facilities benefited from this program.

With more than 100,000 Hoosier children in child care, it is estimated Indiana could reduce emissions by 119 tons each year simply by encouraging parents to turn off vehicles while dropping off and picking up children at daycare.

There are more than 4,000 licensed or registered child care providers in Indiana. Through this initiative, approximately 100 providers now have “No Idling” signs in place. In the future, many more providers need access to these signs to continue education efforts with staff and parents.



“No Idling” Sign posted at Robin’s Nest Child Care in Indianapolis.

Attachment A

Idling Pre-Survey

This information must be provided in order to receive signs.	<i>For office use only</i>
Facility Name _____	Date Received _____
Contact Name _____	Date Sign Mailed _____
Title _____	Number of Signs _____

- Please classify your knowledge about the environmental dangers with idling vehicles:
 - Very little knowledge.** (Wasn't aware that idling is an environmental or health concern.)
 - Basic knowledge.** (Slightly aware that car fumes lead to air pollution, but didn't really think it would impact the staff and children here.)
 - Fairly knowledgeable.** (I knew idling wasn't good for the environment, but didn't realize it could cause an asthma attack or could increase CO levels inside our childcare facility.)
 - Very knowledgeable.** (Fully aware of the environmental and health issues from car fumes. I already knew that car fumes are a large cause of air pollution in Indiana and that even at our own facility, idling cars could trigger an asthma attack in a sensitive child and the fumes could enter our building.)
- Please indicate the approximate number of vehicles that idle at the childcare facility on a typical day (please count drop off and pick up separately and include vans/buses owned by the childcare):
 - 0-1
 - 1-5
 - 5-10
 - 10-20
 - Other _____
- On average, approximately how long do vehicles idle:
 - 1-5 minutes
 - 6 – 10 minutes
 - 11 – 15 minutes
 - 16 – 20 minutes
 - Other _____
- Please describe the procedures in place at the childcare facility related to idling vehicles (circle all that apply):
 - No procedures are in place.
 - Parents are verbally asked not to idle vehicles when they first start bringing children.
 - Staff are verbally asked not to idle vehicles.
 - Parents are frequently reminded to turn their vehicles off when dropping off or picking up children.
 - A written procedure is included in our parent handbook.
 - A written procedure is included in our training handbook for childcare personnel driving our busses/vans.
 - A sign is posted reminding parents to turn off vehicles.
 - Vehicle idling is not allowed in the parking lot.
 - Other _____

Idling Post-Survey

Facility Name _____ Contact Name _____ Title _____	<i>For office use only</i> Date Received _____
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1. After joining the 5-star program and learning about vehicle idling, please classify your knowledge about the environmental dangers with idling vehicles:
 - a. **Very little knowledge.** (Aware that idling is an environmental or health concern.)
 - b. **Basic knowledge.** (Slightly aware that car fumes lead to air pollution, but didn't really think it would impact the staff and children here.)
 - c. **Fairly knowledgeable.** (I knew idling wasn't good for the environment, but didn't realize it could cause an asthma attack or could increase CO levels inside our childcare facility.)
 - d. **Very knowledgeable.** (Fully aware of the environmental and health issues from car fumes. I know that car fumes a large cause of air pollution in Indiana and that even at our own facility, idling cars could trigger an asthma attack in a sensitive child and the fumes could enter our building and raise carbon monoxide levels.)

2. After joining the 5-star program and educating parents about vehicle idling, please indicate the approximate number of vehicles that idle at the childcare facility on a typical day (please count drop off and pick up separately and include vans/buses owned by the childcare):
 - a. 0-1
 - b. 1-5
 - c. 5-10
 - d. 10-20
 - e. Other _____

3. On average, approximately how long do vehicles idle:
 - a. 1-5 minutes
 - b. 6 – 10 minutes
 - c. 11 – 15 minutes
 - d. 16 – 20 minutes
 - e. Other _____

4. After joining the 5-star program and educating parents about vehicle idling, please describe the procedures in place at the childcare facility related to idling vehicles (circle all that apply):
 - a. No idling signs are posted in the parking lot.
 - b. No idling policy is written into the parent handbook.
 - c. No idling policy is in writing for staff and included in staff training.
 - d. Informational brochures about the dangers of idling are distributed to parents.
 - e. Other: _____

Attachment B

No Idling Policy



As a member of the 5-Star Environmental Recognition Program, we have committed to reduce vehicle idling at our facility. Please help us meet our commitments to this program.

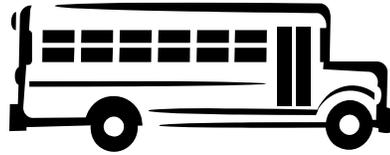
PLEASE TURN YOUR VEHICLES OFF when in our parking lot.

This will help reduce exposure of our children to exhaust fumes that can enter our building and could prevent accidents as well.

-Thank you for your commitment to reducing vehicle emissions around our children!



School Bus Idling Policy



As a member of the 5-Star Environmental Recognition Program, we have committed to reduce vehicle idling at our facility. This includes our own transportation vehicles.

We are reducing vehicle idling at our facility by implementing the following idling limits on our vehicles:

At 32 degrees or above, vehicles will be allowed to idle for up to 5 minutes;

From 20 degrees to 32 degrees, vehicles will be allowed to idle for up to 15 minutes;

From 20 degrees and below, vehicles will be allowed to idle for up to 30 minutes or until the front windows are defrosted and all safety equipment is operable.

-Thank you for your commitment to reducing vehicle emissions around our children!

