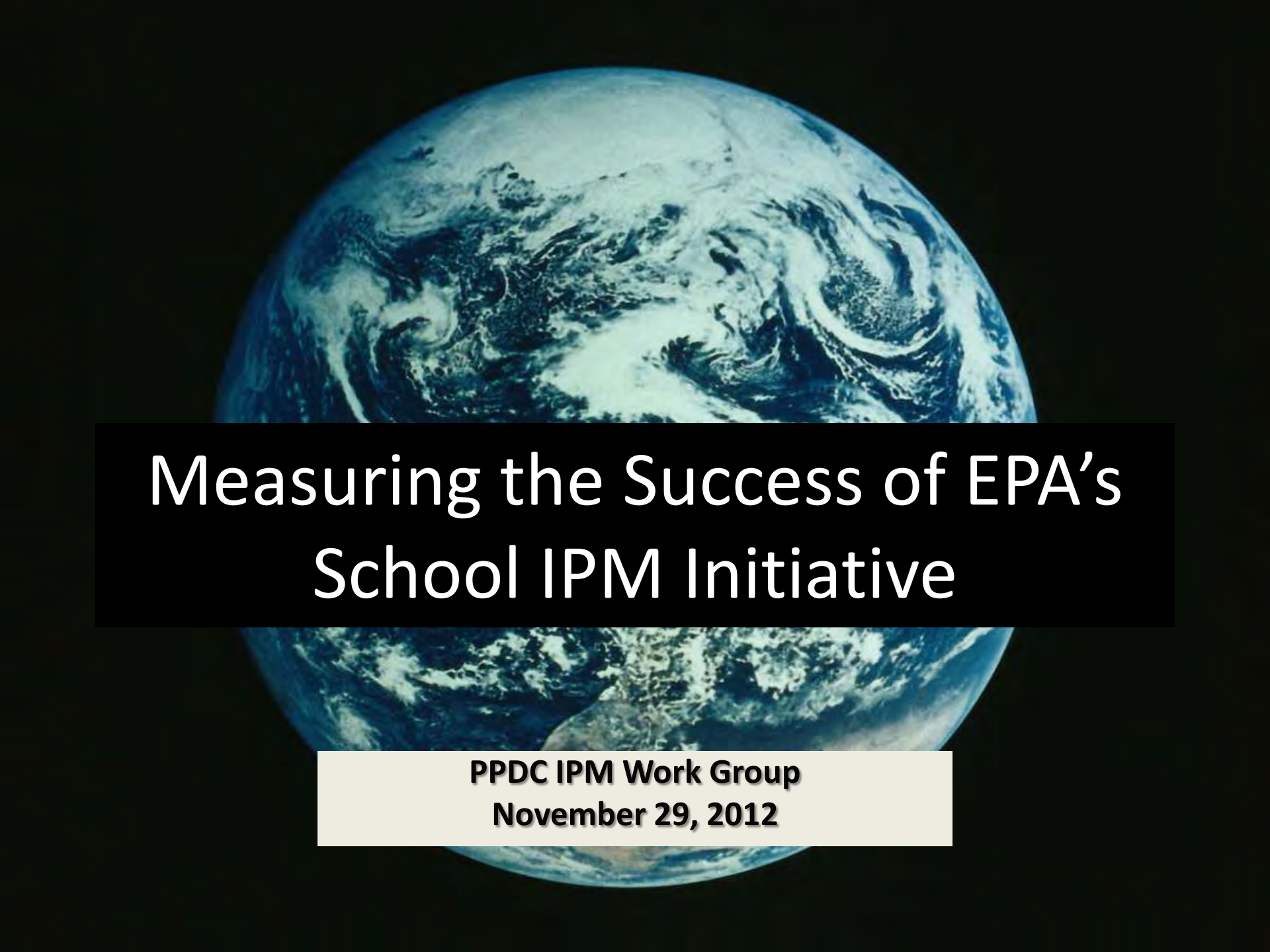


US EPA ARCHIVE DOCUMENT

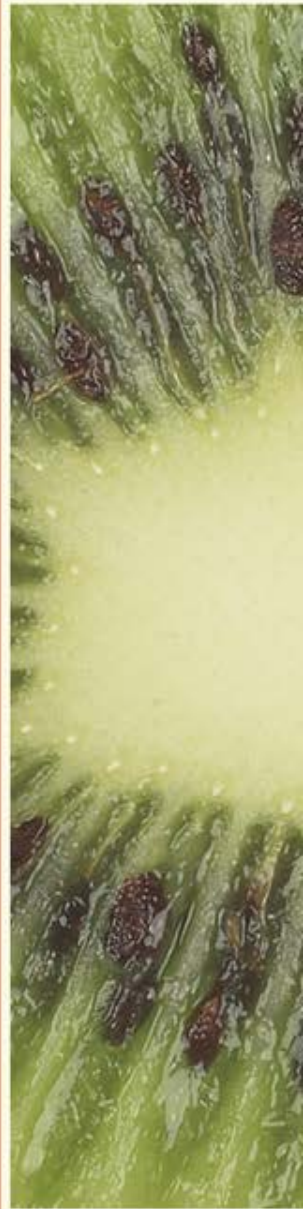


Measuring the Success of EPA's School IPM Initiative

**PPDC IPM Work Group
November 29, 2012**

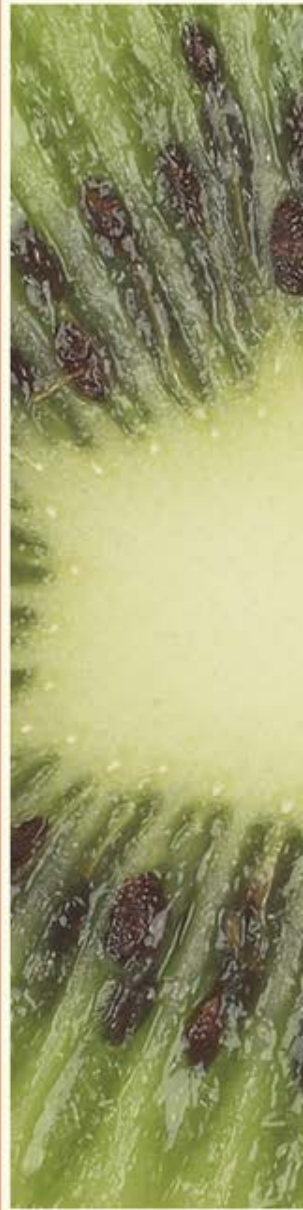
Subgroup One

- ***Charge:*** Advise EPA on the development of metrics to assess the effectiveness of the Agency's School IPM Initiative.
- ***Deliverables:***
 - PowerPoint presentation and
 - Written document with list of recommended metrics for EPA use to judge its impacts; how to measure; sources; and rationale for selections.



Step One. Comprehensive review of:

- a. Performance measures developed by the National IPM Evaluation Group suggested by Bill Coli
(www.ipm.gov/logicmodels)
- b. Metrics used by school IPM experts including three current surveys
(www.ipminstitute.org/school_ipm_2015/resources.htm#Surveys)
- c. Specific commitments made by US EPA in its strategic plan, and by grantees in current projects.



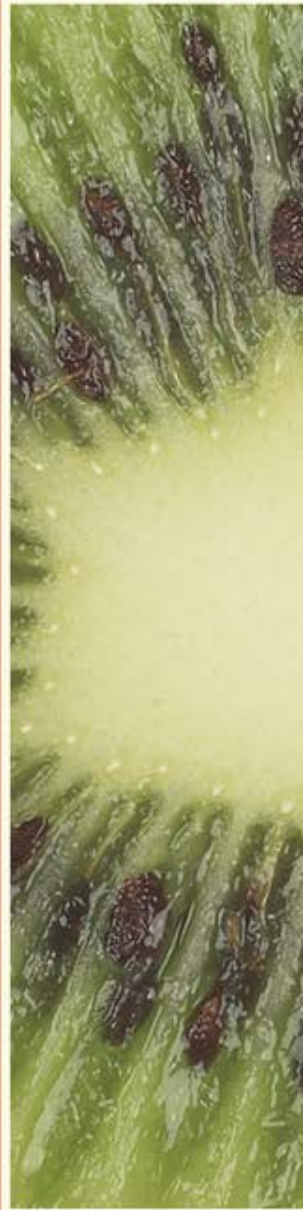
Current SIPM Grant Metrics – pre/post delta for:

- | | | | |
|-----|---|------------------|----|
| 1. | Districts participating in Coalition development | (NW, MW, SE, NOL | CO |
| 2. | Change Agents workshops | (NW, MW, SE, NOL | CO |
| 3. | District Pilots – assessments/one-on-one training | (MW, NOL, | CO |
| 4. | Community Awareness education | (NOL | |
| 5. | Materials distributed related to certification | (NW, | WI |
| 6. | Certification/verification participation | (NW, MW | |
| 7. | IPM CEUs for PCOs | (NW, SE | |
| 8. | Pest Press development/distribution | (NW, MW, NOL | CO |
| 9. | Beta test i-PestManager | (NW, MW, | CO |
| 10. | Pest complaints | (MW, SE | |
| 11. | Pest density/pressure | (MW, NOL | |
| 12. | Pesticide Applications | (MW, SE | |
| 13. | Reduced Risk Pesticides | (NOL | |
| 14. | Disease/Asthmatic episodes | (NOL, WI | |
| 15. | Pest Management Costs | (MW, NOL, WI | |
| 16. | Pest Management Policies/Plans | (NOL | |

NW = OR/WA

MW=IN/OH

SE=FL/GA/AL



Step Two. Selected low-cost, high-impact measures at two levels:

1. Intermediate behavior change schools/change agents including state lead agencies.
 - including tracking changes as a direct result of EPA activity.
2. Long-term condition changes.

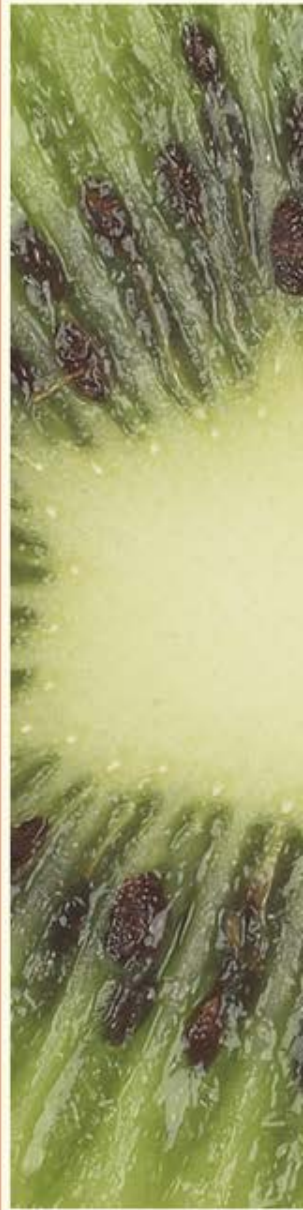


Intermediate behavior change:

#1. Measures at state level:

- a. Number of states with statewide, coordinated programs involving multiple entities.
- b. Total number of school IPM FTEs at state agencies, institutions per state.
- c. Total non-public FTEs per state.
- d. Total dollars invested per state per year.
- e. Number of school districts receiving training per state, number participants.
- f. Number of districts providing internal training.
- g. Number of communications to school districts.
- h. Number of districts receiving communications.

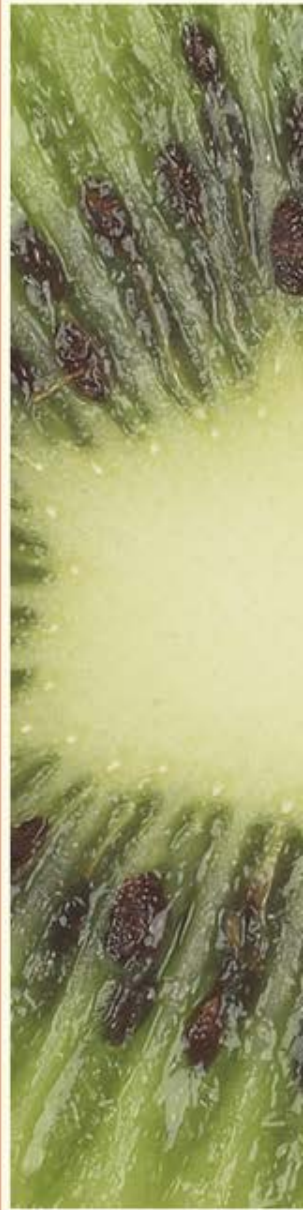
Have been measured by surveys completed by lead individuals in each state in 2008 and 2012.



Intermediate behavior change (continued):

#2. Number of districts implementing verifiable IPM as per EPA definition:

- Understanding your pests.
- Knowing when to take action against key pests.
- Monitoring pest populations.
- Removing conditions that allow pest infestation.
- Using one or more effective pest control methods including sanitation, structural maintenance, and nonchemical methods in place of or in combination with pesticides.



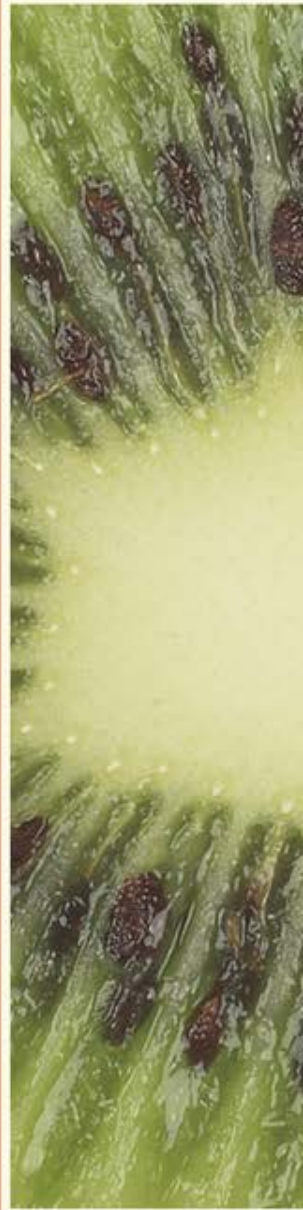
Verifiable IPM can be measured via:

1. Self-assessment surveys

- National School IPM Working group currently surveying districts in more than 40 states.
- Combination on-line survey and phone follow up.
- Cost-effective.

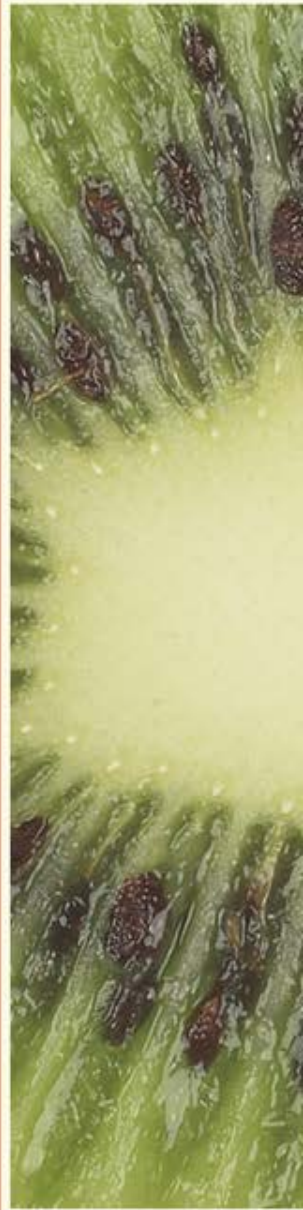
2. On-site assessment tools

- IPM STAR (www.ipmstar.org)
- iPestManager
- IPM Calculator (www.ipmcalculator.com)
- Some are more costly, more accurate, likely to be used on a limited basis due to cost.



Long-term condition change, can also be measured by survey or on-site evaluation of a sample of districts:

1. Average percent reduction in pest problems and/or complaints per school district.
2. Average percent reduction in pesticide applications per school district.
3. Average change in pest management costs per school district.
4. Improved ability of designated school grounds features to meet intended purpose, e.g., improved availability of athletic competition and practice fields due to healthier, more resilient turf, improved soil condition.



More challenging, costly long-term condition measures that have been documented in the past:

1. Number of asthma-related student and staff absences.
2. Level of pest-related asthma allergens.
3. Level of pesticide residues on exposed surfaces.

Recommendations:

Tracking results of research that pertains to these measures.

As needs arise, the Agency may also consider supporting research efforts to track these measures on a limited basis under grant-funded research and implementation projects.



Addressing Challenging Children's Health Measures

Build upon the types of measures recommended in this presentation to integrate children's health element

Draw upon expertise of EPA's children's health partners

Collaborate, on a workgroup basis, between EPA and partners to develop initial measures during year one of EPA's 3-year plan

Refine measures during years 2 and 3



School district-level survey in progress

325 responses to date from eight states

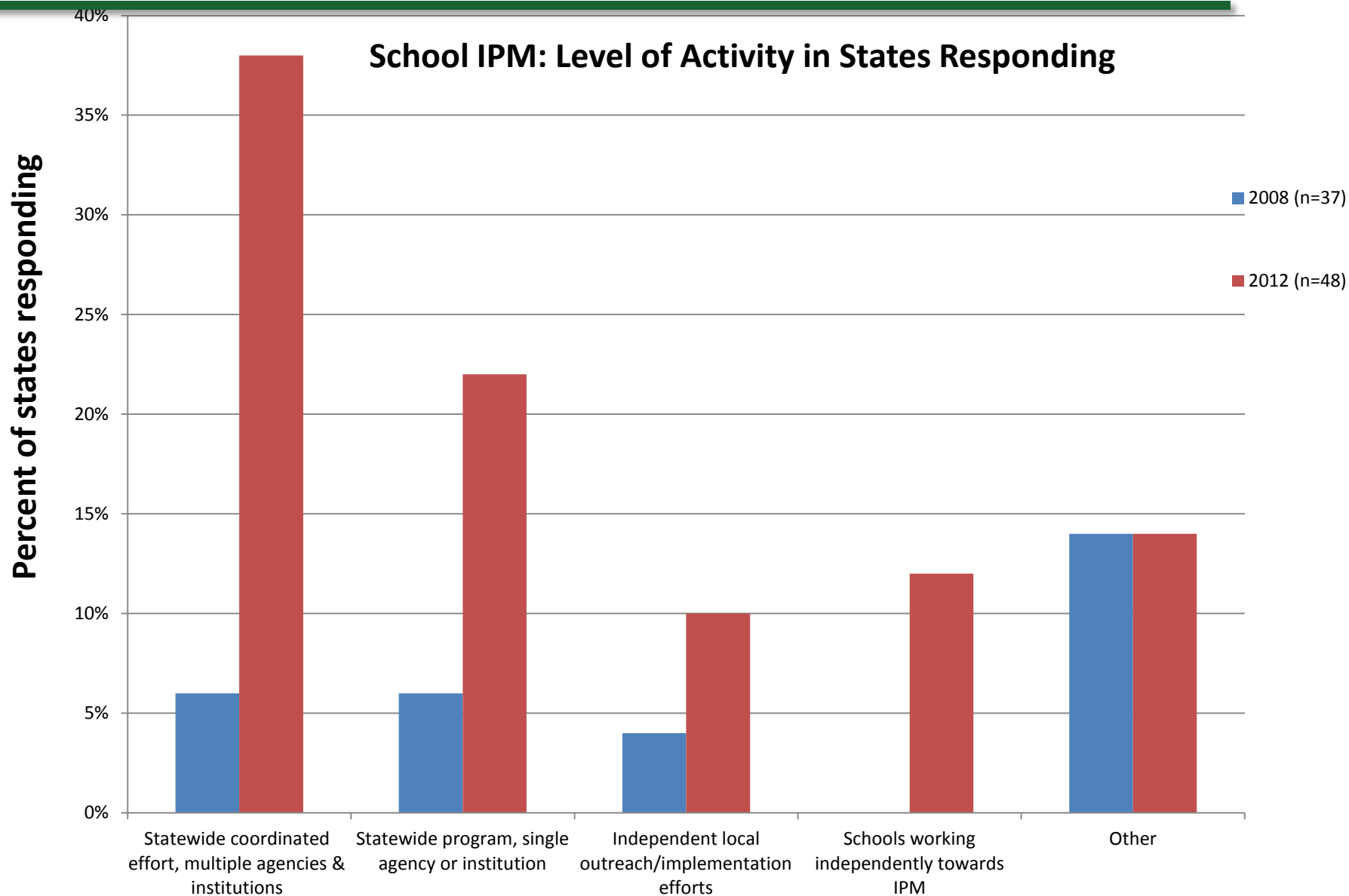
	Yes	No	Don't know
Written IPM policy?	40.3%	46.2%	13.5%
Written IPM plan?	36.6%	58.8%	4.6%
IPM coordinator?	43.1%	52.0%	4.9%
- more than years of experience?	80.7%	19.3%	
Do you track pest complaints?	38.1%	62.0%	
Do you track pest mgt costs?	51.4%	31.7%	16.9%
Do you track pesticide use?	54.8%	30.5%	14.8%
Contracted services (vs. in house)			
- structural	54.8%		
- grounds	37.8%		

School district-level survey (cont.)

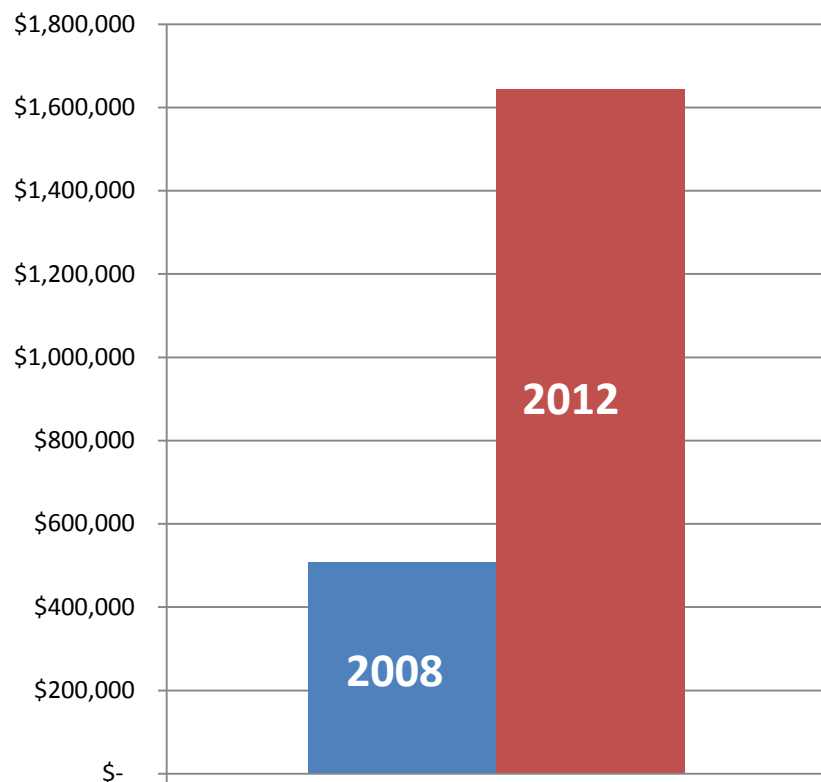
	Yes
Do you use the following tools?	
- pest or IPM factsheets	39.5%
- pest or IPM posters	10.9%
- IPM curricula for student instruction	2.0%
- school IPM manuals on best practices	35.6%
- IPM training for staff	18.4%
- <i>Pest Press</i> or other IPM newsletter	16.8%
Regular/routine pesticide applications?	
- in or around buildings	64.9%
- on school grounds	57.9%
Licensed applicators only?	
- buildings	94.7%
- grounds	87.7%



Measures to date: 2008 and 2012



School IPM Funding at State Level



Since 2006:
Number students and staff impacted
by demonstrations: 613,284

by coalitions: 3,327,920

69% avg. pesticide use reduction

31% avg. pest complaint reduction

166 meetings and workshops

Contact database to > 20,000
professionals working in schools

34 publications

\$4,496,315 funding leveraged; US EPA,
USDA, USDA IPM CENTERS, CDC

THANK YOU!

