Background
Federal law requires that applicators of restricted-use pesticides demonstrate a minimum standard of competency through a process called certification. However, there is no federal standard requiring any additional training beyond initial certification.

Pursuant to federal law, states offer initial certification for a specified period, usually 3 to 5 years, after which most states require recertification through one of three mechanisms: 1) continuing education units, 2) workshops, or 3) examination.

States that offer continuing education units (CEUs) require applicators to get a certain number of CEUs before recertification will be granted, either a certain number of CEUs each year, or over the span of their certification period. States that offer workshops (i.e., single-course offering) require applicators to attend a specific training event. Applicators who fail to acquire the specified number of CEUs or to attend a workshop during their certification period are required to retake an examination. Finally, some states offer a written examination as the only option to recertify.

Problem Statement
Ensuring continuing competency is one area receiving much attention in the C&T/WPS regulatory changes proposed by EPA. With the lack of a federal standard for recertification, the differing recertification requirements implemented by the states have raised many inconsistencies and processes nationwide in ensuring continued competency of pesticide applicators. A national standard for providing continuing pesticide safety education opportunities by competent educators would provide a minimum standard for all states to rely on.

State Surveys
To assist EPA in developing a national standard through the proposed regulatory changes, CTAG conducted two separate surveys to get a baseline of the states existing systems and processes they use to ensure continuing competency. The first survey, conducted in August 2006, gathered information on existing programs and how states evaluate their recertification efforts. The second survey was distributed in April 2007 asking states what practices would best assure continued competency of pesticide applicators. Summaries of the survey results are attached.

Overall, the states who responded to the surveys felt that, although the systems in place are not perfect, they are meeting the goal of achieving continuing competency. Changes that would improve the credibility of recertification programs and ensure continued competency of applicators include:
- Improving the ability to monitor attendance at recertification courses and program content.
- Adopting guidelines for course evaluation defining acceptable content criteria and instructor qualifications.
- Evaluating an accredited recertification educational course or program with some type of pre- and post-survey tool.

These same states also said, however, that limited time and funding resources are the biggest barriers for implementing change.
| Survey #1 Results Summary (August 2006) | States responding = 25  
Total of individual responses ( ) will not always equal total respondents |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Part I: Characterize State Recertification Requirements</strong></td>
<td></td>
</tr>
<tr>
<td>Q 1 - What are the basic (primary) methods for recertifying applicators?</td>
<td>CEUs (12); Workshops (3); Exam only (3); Combination of above (19); NR (2)</td>
</tr>
</tbody>
</table>
| Q 2 - What is (are) the recertification periods in your state? | Split: Private, 3-5 yrs; commercial, 1-3 yrs (5)  
Both: 1 yr (1); 3 yrs (8); 4 yrs (1); 5 yrs (7)  
NR (3) |
| Q 3 - If multiple methods for recertification are offered (see Q1) which is preferred? | Attend meetings/workshops (19); NR (2) |
| Q 4 - If multiple methods for recertification are offered (see Q1), % applicators choosing method. | Attend meetings/workshops, 95-99%: (11)  
Attend meetings/workshops, 75-94%: (2)  
Attend meetings/workshops, < 74%: (6) |
| Q 5 - Besides federally defined applicators, does your state certify others? | Registered technicians (7); Dealers (4); Public school employees (1) |
| Q 6 - Is certification required for all applications, or only RUPs? | Private, RUPs only (19)  
Private, all pesticides (2)  
Commercial, RUPs only (1)  
Commercial, all pesticides (20) |
| Q 7 - May an uncertified applicator work under direct supervision of a certified applicator? | Yes (18)  
No (4)  
NR (3) |
| **Part II: Ensuring Continuing Competency** | | |
| Q 1 - Methods in place to ensure quality of instructors? | Evaluation of instructor’s credentials (21)  
Minimum yrs as certified applicator or equivalent education (3)  
Monitor sessions (3)  
No formal process or not enforced (2) |
| Q 2 - Methods in place to ensure quality of content? | Evaluation of agenda (19)  
Workshop and/or guidelines to sponsors (2)  
Monitor sessions (3)  
No formal process or not enforced (3) |
| Q 3 - Methods in place to ensure educational quality (outcomes)? | Exam results (3)  
Violation/enforcement activities (4)  
Monitor sessions (12)  
Post session evaluation (4)  
No formal process or not enforced (4) |
|---|---|
| Q 4 - If you allow recertification by exam, how do you ensure competency? | Not allowed by statute (1)  
Closed book / updated exams (16)  
Exam only ensures initial/minimum competency, not continued competency (4)  
No formal process or not enforced (2) |
| Q 5 - Other evidence that supports your recertification method? | Reduction in complaints/violations (10)  
Hands-on, face-to-face better learning environment (4)  
Regularly updated training materials (1)  
None or no response (10) |
| Q 6 - List aspects that work well in your state in ensuring competency? | Live training (10)  
Online training, video (1)  
Knowledgeable trainers (1)  
Detailed course applications / review (2)  
Monitoring of sessions (2)  
Exam and study material updates (3)  
Defined roles between SLA and CES (1)  
Limiting the number of times an exam an be retaken (1)  
Mail-in quizzes for CEUs (1) |
| How do you know they are successful? | Reduction in complaints/violations (11)  
Personal observations (e.g., inspectors, others) (5)  
Evaluations / Practice adoption (3)  
Quality of exams, manuals, and training (4)  
Working relationship between SLA and CES (1)  
Attendance at meetings (2) |
| Q 7 - List aspects that do not work well in your state in ensuring competency? | Lack of monitoring at sessions (6)  
Lack of course evaluation (2)  
Lack of verification that attendees learned something (2)  
Audience too large (1)  
Attending meetings not specific to person’s certification (1)  
Limited-English training, instructors (1)  
Companies w/ many employees “memorizing” the exam questions (1)  
Self-monitoring of attendance at workshops (1)  
Take-home tests (1)  
Positive ID verification (1) |
| How do you know they are least successful? | Personal observations (e.g., inspectors, others) (4)  
Complaints sessions were “sale pitches” or not relevant (5)  
Falsification on sign-in sheets (1)  
Applicators not paying attention / leaving early (2)  
Cheating on exams / surrogate exam takers (2)  
Can’t keep up updating training materials / exams (2)  
Allowing retesting for recertification (2)  
Repeat information at sessions (1) |
| Q 8 - How would you change your state’s process to improve continuing competency? | Have a different educational theme / focus each year (1)  
Set criteria to evaluate course / competency of instructors (5)  
Reduce number of categories (2)  
Monitor all recertification meetings (2)  
Positive ID verification (2)  
Proctored online training (2)  
Retesting option (2)  
Require private applicators to purchase manual, take test (1)  
Create multiple exams for same category (1)  
Standardize recertification periods (2)  
Update materials / exams more frequently (3) |
|---|---|
| Why do you think this change will be effective? | Theme would provide more consistent message / focused content (3)  
Evaluation criteria provides better product / knowledgeable instructors (7)  
Fewer categories makes better use of resources / verifiable training (2)  
Periodic testing ensure industries knowledge is advancing (3)  
Multiple exams minimizes chance to memorize questions / cheating (1)  
Monitoring sessions / Positive ID assures ensures correct identity (2)  
Regularly scheduled material / exam updates provide up to date information (4) |
| What obstacles do you see to making changes? | Limited availability of trainers (4)  
Reluctance by sponsors to evaluate / time to develop (2)  
Increased workload (1)  
Staff, time, funds (16)  
Regulation changes (3)  
Limited literacy skills (1)  
Industry and applicator objections (1) |
| Q 9 - What changes are planned in your state to improve continuing competency? | Specify competency requirements of trainers (2)  
Certification of dealers (1)  
Technician recertification requirements (1)  
Ensuring validity of exams (2)  
Updating materials (2)  
Computer-based testing system (1)  
Adding new categories (invasive species; antimicrobial; termite) (1)  
Testing of private applicators (1)  
Standardize several recertification periods (1)  
Positive ID for private applicators (1)  
Improve current tracking system (1)  
Increase / revise CEU requirements (2)  
More monitoring of sessions (1) |
| Q 10 - Disregarding staffing, funding, and regulatory limitations, what would be the ideal process to ensure continuing competency? | Smaller groups / more hands on (3)  
Evaluations for each course / pre-post tests (5)  
Greater pool of qualified instructors (2)  
Monitor sessions / positive ID (7)  
Improve sign-in (e.g., bar code) (1)  
Advanced workshops w/ tests (1)  
Retest all applicators at some interval (4)  
Receive updated materials (4)  
Practical / validated exams (1)  
Increase internet training / testing (4)  
More training / practical content (9) |
Q 11- What would you see as a desired national standard to ensure continuing competency?

- Ensure consistency / quality of course content (5)
- Course assessment / evaluation tool (1)
- Possible? Standards would be minimum so would states adopt? (3)
- Standardization of categories to allow reciprocity (2)
- Standardization of CEUs (4)
- More quality speakers / materials (2)
- Recertification through retesting at some interval (2)
- Require positive ID (2)
- More training via internet (1)

Survey #2 Results Summary (April 2007)

<table>
<thead>
<tr>
<th>Practices to best assure continued competency</th>
<th>States responding = 30</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Q 1 - What would you consider the ideal length for a recertification period?</strong></td>
<td>Total of individual responses ( ) will not always equal total respondents</td>
</tr>
<tr>
<td>1 year (1) 2 years (3) 3 years (18) 4 years (1) 5 years (8)</td>
<td></td>
</tr>
<tr>
<td><strong>Q 2 - Should recertification periods be the same for commercial and private?</strong></td>
<td></td>
</tr>
<tr>
<td>Yes (23) No (6) NR (1)</td>
<td></td>
</tr>
<tr>
<td><strong>Q 3 - Should testing be the only recertification option?</strong></td>
<td></td>
</tr>
<tr>
<td>If yes, should different exams be used for certification and recertification?</td>
<td></td>
</tr>
<tr>
<td>Yes (1) No (0) NR (1)</td>
<td></td>
</tr>
<tr>
<td><strong>Q 4 - Should applicators have the option of testing and CE?</strong></td>
<td></td>
</tr>
<tr>
<td>Yes (27) No (4)</td>
<td></td>
</tr>
<tr>
<td><strong>Q 5 - Minimum time per credit required? e.g. 1 credit = 1 hour</strong></td>
<td></td>
</tr>
<tr>
<td>Yes (28) No (4) 1 hour/1 credit (19) 30 min/1 credit (4)</td>
<td></td>
</tr>
<tr>
<td><strong>Q 6 - Should a standard number of recertification credits be required, or vary by category?</strong></td>
<td></td>
</tr>
<tr>
<td>Standard (7) Vary (13) NR (8)</td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td>Yes</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>Q 7 - Should a minimum amount of Core specific credits be required for recertification?</td>
<td>21</td>
</tr>
<tr>
<td>Q 8 - Should a minimum amount of Category specific credits be required for recertification?</td>
<td>21</td>
</tr>
<tr>
<td>Q 9 - Should there be a limit to number of credits allowed to accumulate in one year?</td>
<td>9</td>
</tr>
<tr>
<td>Q 10 - Should there be a specific list of allowable topics?</td>
<td>20</td>
</tr>
<tr>
<td>Q 11 - Should there be a specific list of unacceptable topics?</td>
<td>19</td>
</tr>
<tr>
<td>Q 12 - Should presenters be accredited?</td>
<td>21</td>
</tr>
<tr>
<td>Q 13 - Verification method of applicator attendance? Roster (4) Sign-in (15) Photo ID + sign-in (3) Electronic (2) Monitoring (1) Allow flexibility (3) NR (2)</td>
<td></td>
</tr>
<tr>
<td>Q 14 - Should photo ID be required for verification? ID for all (5) large meetings ID at central location (3)</td>
<td>9</td>
</tr>
</tbody>
</table>