

**IOWA COMMERCIAL APPLICATOR CERTIFICATION
CONTINUING INSTRUCTIONAL COURSE (CIC) PROGRAM AGENDA
(2021, 2022, 2023)**

The following educational topics must be covered to satisfy the federal competency standards (40 CFR Part 171) and Iowa-specific topics. Iowa-specific topics should include current and forecasted pest issues and legislative and regulatory issues, and be appropriate for applicators in a given category.

Pesticide stewardship and professionalism are integral parts of safe and effective pest control programs. Pesticide stewardship includes IPM, resistance management, scouting, economic and/or aesthetic thresholds, pesticide selection practices, reduced risk alternatives, conservation practices, & best management practices. IDALS strongly recommends pesticide stewardship and professionalism be included in an effective Continuing Instruction Course Program.

Category 1 - Ag Pest Control (1A, 1B, 1C, 1D)

Applicators must demonstrate practical knowledge of crops, grasslands, and non-crop agricultural lands and the specific pests of those areas on which they may be using pesticides. The importance of such competency is amplified by the extensive areas involved, the quantities of pesticides needed, and the ultimate use of many commodities as food and feed.

Program 1 (2021)

1. Application equipment use, maintenance, and calibration
2. Safe application techniques, including pesticide drift reduction
3. Category-specific pests, pest management and pesticides, including phytotoxicity as appropriate

Program 2 (2022)

1. Pesticide use and the environment
2. Pesticide labels and comprehension, including restricted entry interval and preharvest interval
3. Category-specific pests, pest management and pesticides

Program 3 (2023)

1. Personal protective equipment and safe handling
2. Storage of pesticides, including chemical security
3. Category specific pests, pest management and pesticides

Category 2 – Forest Pest Control

Applicators must demonstrate practical knowledge of types of forests, forest nurseries, and seed production within the jurisdiction of the certifying authority and the pests involved. The required knowledge includes the cyclic occurrence of certain pests, specific population dynamics, and pesticide vulnerability as a basis for pesticide applications.

Program 1 (2021)

1. Application equipment use, maintenance, and calibration
2. Safe application techniques, including pesticide drift reduction
3. Category-specific pests, pest management and pesticides, including phytotoxicity as appropriate

Program 2 (2022)

1. Pesticide use and the environment
2. Pesticide labels and comprehension, including restricted entry interval and preharvest interval
3. Category-specific pests, pest management and pesticides

Program 3 (2023)

1. Personal protective equipment and safe handling
2. Storage of pesticides, including chemical security
3. Category specific pests, pest management and pesticides

Category 3 – Ornamental, Turf and Greenhouse (30, 3T, 3G)

Applicators must demonstrate practical knowledge of pesticide problems associated with the production and maintenance of ornamental plants and turf. Because of the frequent proximity of human habitations to application activities, applicators in this category must demonstrate practical knowledge of application methods that will minimize or prevent hazards to humans, pets, and other domestic animals.

Program 1 (2021)

1. Application equipment use, maintenance, and calibration
2. Safe application techniques, including pesticide drift reduction
3. Category-specific pests, pest management and pesticides, including phytotoxicity as appropriate

Program 2 (2022)

1. Pesticide use and the environment
2. Pesticide labels and comprehension, including restricted entry interval and preharvest interval
3. Category-specific pests, pest management and pesticides

Program 3 (2023)

1. Personal protective equipment and safe handling
2. Storage of pesticides, including chemical security
3. Category specific pests, pest management and pesticides

Category 4 – Seed Treatment

Applicators must demonstrate practical knowledge including recognizing types of seeds to be treated, the effects of carriers and surface active agents on pesticide binding and germination, the hazards associated with handling, sorting and mixing, and misuse of treated seed, the importance of proper application techniques to avoid harm to non-target organisms, and the proper disposal of unused treated seeds.

Program 1 (2021)

1. Application equipment use, maintenance, and calibration
2. Safe application techniques, including disposal of unused treated seed
3. Category-specific pests, pest management and pesticides

Program 2 (2022)

1. Pesticide use and the environment
2. Pesticide labels and comprehension, including seed coloration, carriers and surface active agents which influence pesticide binding and effect on germination
3. Category-specific pests, pest management and pesticides

Program 3 (2023)

1. Personal protective equipment and safe handling
2. Storage of pesticides, including chemical security
3. Category specific pests, pest management and pesticides

Category 5 – Aquatic Pest control

Applicators must demonstrate practical knowledge of the characteristics of various aquatic use situations, the potential for adverse effects on non-target plants, fish, birds, beneficial insects and other organisms in the immediate aquatic environment and downstream, and the principles of limited area application.

Program 1 (2021)

1. Application equipment use, maintenance, and calibration
2. Safe application techniques, including pesticide drift reduction
3. Category-specific pests, pest management and pesticides, including phytotoxicity as appropriate

Program 2 (2022)

1. Pesticide use and the environment
2. Pesticide labels and comprehension, restricted entry interval and preharvest interval when applicable
3. Category-specific pests, pest management and pesticides

Program 3 (2023)

1. Personal protective equipment and safe handling
2. Storage of pesticides, including chemical security
3. Category specific pests, pest management and pesticides

Category 6 – Right-of-Way

Applicators must demonstrate practical knowledge of the types of environments (terrestrial and aquatic) traversed by rights-of-way, recognition of target pests, pesticide persistence beyond the intended period of pest control, and techniques to minimize nontarget exposure, runoff, drift, and excessive foliage destruction.

Program 1 (2021)

1. Application equipment use, maintenance, and calibration
2. Safe application techniques, including pesticide drift reduction
3. Category-specific pests, pest management and pesticides, including phytotoxicity as appropriate

Program 2 (2022)

1. Pesticide use and the environment
2. Pesticide labels and comprehension, including restricted entry interval and preharvest interval
3. Category-specific pests, pest management and pesticides

Program 3 (2023)

1. Personal protective equipment and safe handling
2. Storage of pesticides, including chemical security
3. Category specific pests, pest management and pesticides

Category 7 – Industrial, Institutional, Structural & Health Related (7A, 7B, 7D, 7E)

Applicators must demonstrate a practical knowledge of industrial, institutional, and structural pests, including recognizing those pests and signs of their presence, their habitats, their life cycles, biology, and behavior as it may be relevant to problem identification and control. Applicators must demonstrate practical knowledge of appropriate types of formulations and application methods that 1) minimize environmental impacts of outdoor exposures, 2) minimize acute and chronic human exposure including babies, children, pregnant women and elderly, 3) avoid contamination of food, and 4) minimize damage to and contamination of areas treated.

Program 1 (2021)

1. Application equipment use, maintenance, and calibration
2. Safe application techniques, including reduction of off-target movement
3. Category-specific pests, pest management and pesticides

Program 2 (2022)

1. Pesticide use and the environment
2. Pesticide formulations and labels, including restricted entry interval
3. Category-specific pests, pest management and pesticides

Program 3 (2023)

1. Personal protective equipment and safe handling
2. Storage of pesticides, including chemical security
3. Category specific pests, pest management and pesticides

Category 7C – Fumigation

Applicators must demonstrate practical knowledge of the pest problems and pest control practices associated with performing fumigation applications of restricted use pesticides to sites other than soil. Pest factors that influence fumigant activity, including 1) influence of pest factors on fumigant volatility, 2) factors that influence gaseous movement through the area being fumigated and into the air, 3) identifying pests causing the damage and verifying they can be controlled with fumigation, 4) understanding the relationship between pest density and application rate, and 5) the importance of proper application rate and timing.

Program 1 (2021)

1. Application equipment use, maintenance, and calibration
2. Safe application techniques, including air monitoring, buffer zones and conditions that affect timing of applications
3. Category-specific pests, pest management and pesticides

Program 2 (2022)

1. Pesticide use and the environment
2. Pesticide labels and comprehension, including labeling requirements
3. Category-specific pests, pest management and pesticides

Program 3 (2023)

1. Personal protective equipment, including respirators required
2. Storage of pesticides, including chemical security
3. Category specific pests, pest management and pesticides

Category 8 – Public Health

Applicators must demonstrate practical knowledge of pests that are important vectors of disease, including recognizing the pests and signs of their presence, their habitats, their life cycles, biology and behavior as it may be relevant to problem identification and control. The required knowledge includes how to minimize damage to and contamination of areas treated, acute and chronic exposure of people and pets, and non-target exposures.

Program 1 (2021)

1. Application equipment use, maintenance, and calibration
2. Safe application techniques, including pesticide drift reduction
3. Category-specific pests, pest management and pesticides, including vector disease transmission

Program 2 (2022)

1. Pesticide use and the environment, including a variety of environments ranging from streams to inside of buildings
2. Pesticide labels and comprehension, including restricted entry interval
3. Category-specific pests, pest management and pesticides

Program 3 (2023)

1. Personal protective equipment and safe handling
2. Storage of pesticides, including chemical security
3. Category specific pests, pest management and pesticides

Category 11 - Aerial Application

Applicators must demonstrate practical knowledge of the pest problems and pest control practices associated with performing aerial application of pesticides. In addition to satisfying the requirements of this category, aerial applicators also must satisfy the recertification requirements of any other Iowa pesticide applicator category for which they are certified.

Program 1 (2021)

1. Application equipment use, maintenance and calibration including pre-trip inspection, components of an aerial application system, nozzle number and placement, interpreting a nozzle flow rate chart, and verifying flow rate
2. Safe application techniques, including pesticide drift reduction, weather conditions, evaluating drift potential, flight altitude and pattern
3. Category-specific pests, pest management and pesticides, including phytotoxicity as appropriate

Program 2 (2022)

1. Pesticide use and the environment, including pesticide application record keeping
2. Pesticide labels and comprehension, including restricted entry interval and preharvest interval, and restrictions specific to aerial application of pesticides including spray volumes, buffers and no-spray zones
3. Category-specific pests, pest management and pesticides

Program 3 (2023)

1. Personal protective equipment and safe handling
2. Storage of pesticides, including chemical security
3. Category-specific pests, pest management and pesticides

Category H - Pesticide Handler

Commercial handlers are those who handle any pesticide in other than unopened containers for the purposes of preparing, mixing, or loading pesticides for application by another person, repackaging bulk pesticides, or disposing of pesticide-related wastes from these activities. A certified handler is required to operate under the direct supervision of a licensed commercial applicator, noncommercial applicator, public applicator, or pesticide dealer and may not apply any restricted use pesticide nor commercially apply any other pesticide.

Program 1 (2021)

1. Safe handling of pesticides, including responding to spills and accidents
2. Recognizing pesticide poisoning symptoms
3. Mixing procedures, including dilution and compatibility

Program 2 (2022)

1. Pesticide use and the environment
2. Pesticide labels and comprehension
3. Pesticide container handling and disposal

Program 3 (2023)

1. Personal protective equipment
2. Storage of pesticides, including chemical security
3. Secondary containment requirements

Test-only Categories for Iowa

The following categories do not have a continuing instruction course for recertification. Applicators must re-test every three (3) years to maintain their certification.

1. 1E – Animal Pest Control
2. 7F – Antifouling Paints
3. 9 – Regulatory Pest Control
4. 10 – Demonstration and Research