Module 2 — Reading the Label (the most-tested skill on the exam)

CORE exam · 9 practice questions · Ohio exams hand you an actual label and ask questions about it. Here is how to read one under time pressure and find every answer.

Key numbers & facts to memorise

Signal words	CAUTION < WARNING < DANGER < DANGER–POISON
REI	Restricted-entry interval — how long people stay OUT
PHI	Pre-harvest interval — last application to harvest
If the site is not listed	The application is illegal, full stop
Aerial section	Droplet size, release height, wind limits, buffers — enforceable

Why this module matters more than any other

OSU Extension states it plainly: **most Ohio commercial exams include questions about a pesticide label that is included with the exam.** You are handed a real label and asked to extract facts from it. That single sentence should reorganise how you study — label interpretation is not one topic among seven, it is the delivery mechanism for a large share of the questions, spanning law, rates, calculations, PPE, environmental restrictions and intervals.

This is good news, because it means you are not being asked to memorise thousands of products. You are being asked to demonstrate a **repeatable reading procedure** that finds any fact on any label quickly. Applicators who fail this section usually do so by skimming for keywords and answering from prior experience with a similar product, rather than reading the actual document in front of them.

Build the habit now, on real labels, with a timer. Download two or three labels for products you actually use — a corn fungicide, a post herbicide, an insecticide — and practise locating twelve specific facts in under two minutes each. By exam day, the label section should feel like looking up a phone number, not solving a puzzle.

The anatomy of a label, in the order you should read it

Start at the top block: **brand/product name**, the **"RESTRICTED USE PESTICIDE"** box if present, the **ingredient statement** (active ingredient and percentage), the **EPA registration number** and **EPA establishment number**, net contents, and the name and address of the registrant. The signal word — **CAUTION**, **WARNING**, or **DANGER** (with **POISON** and the skull-and-crossbones for the most acutely toxic products) — tells you the acute toxicity category and drives your PPE and handling care.

Next comes the **precautionary statements**: hazards to humans and domestic animals (including the required PPE and any user-safety requirements), environmental hazards (drift, water, pollinators, endangered species), and physical/chemical hazards (flammability, corrosivity). Then **first aid** (formerly

"statement of practical treatment"), **directions for use**, and finally **storage and disposal**. The directions section is the biggest and most-tested: it lists approved sites and crops, target pests, application rates, timing and growth-stage limits, maximum amount per application and per season, re-treatment intervals, spray volume, droplet-size requirements, buffer zones, and the **REI** and **PHI**.

Two habits separate confident readers from anxious ones. First, **check the site list before anything else** — if your crop or site is not on the label, no rate matters, because the application would be illegal. Second, always look for an **aerial application** section; when it exists it governs your drone work with its own minimum carrier volume, droplet class, release height and wind limits, and if a label prohibits aerial application, a drone cannot legally apply it.

Rates, maximums and the intervals people confuse

A label rate is expressed per unit area — pints or fluid ounces per acre, pounds per acre — and there is almost always more than one number. There is the **rate per application** (often a range, tied to pest pressure or weed size) and a **maximum per season** or per crop cycle. If a product allows 2.5 pt/A per application and 5 pt/A per season, two full-rate passes exhaust your season allowance; a third pass is a violation even at a token rate. Exams love this because it requires reading two numbers instead of one.

The **REI (restricted-entry interval)** is a worker-protection interval: how long people must stay out of the treated area after application, enforced under the Worker Protection Standard. The **PHI (pre-harvest interval)** is a residue interval: the minimum time between the last application and harvest, which keeps residues within legal tolerances. Confusing the two is one of the most common wrong answers on the CORE exam, so anchor them: REI protects people, PHI protects the crop/consumer.

Also read the re-treatment interval (minimum days between applications), any rotational-crop restrictions (what you may plant afterwards, and when), and grazing or feeding restrictions for forage. For drone applicators, pay special attention to any **minimum spray volume**: ultra-low-volume aerial application can fall below a label's stated minimum gallons per acre, and no amount of good flying makes that legal.

A twelve-point label drill you can practise today

Work this list in order on any label until it becomes automatic. (1) Is it Restricted Use? (2) Signal word. (3) Active ingredient and percentage. (4) EPA registration number. (5) Is my crop/site listed? (6) Is my target pest listed? (7) Rate per application and per season. (8) Growth-stage or plant-height cutoffs. (9) Minimum carrier volume and droplet-size requirement. (10) Wind/inversion and buffer statements. (11) REI and PHI. (12) Required PPE for the task I am doing.

Then add the three questions that only matter to aerial applicators: does an aerial section exist, does it change any of the above, and does anything prohibit aerial use entirely? Write the answers down. On exam day you will be doing exactly this against an unfamiliar label, and the discipline of writing before answering prevents the single biggest error — answering from what you expect the label to say.

Finally, practise the arithmetic embedded in labels: converting between pints, quarts, fluid ounces and gallons; scaling a per-acre rate to a field; and computing how much product goes into one tank. Module 4 covers the mathematics, but the numbers you will be handed come from a label, so practise them together rather than separately.

Practice questions

Answer these closed-book, then check against the answer key that follows. Ohio requires 70% to pass.

1. According to OSU Extension, what should you expect on most Ohio commercial pesticide exams?

A) Questions about a pesticide label included with the exam
B) An oral interview
C) A practical spray demonstration
D) Only mathematics problems

2. Rank the signal words from least to most acutely toxic:

A) DANGER, WARNING, CAUTION
B) CAUTION, WARNING, DANGER
C) WARNING, CAUTION, DANGER
D) CAUTION, DANGER, WARNING

3. The REI on a label tells you:

A) How long before harvest
B) How long workers must stay out of the treated area
C) How long the product controls the pest
D) How long you may store the product

4. A label allows 2.0 pt/A per application with a 4.0 pt/A seasonal maximum. You have already made two full-rate applications. A third application at 1.0 pt/A is:

A) Legal, because it is below the per-application rate
B) Legal if pest pressure is high
C) A violation — the seasonal maximum is already reached
D) Legal if you wait 30 days

5. Your crop is not listed anywhere on the label. You should:

A) Use the rate for the most similar listed crop
B) Apply at the lowest labelled rate
C) Not apply the product — the application would be illegal
D) Apply and record it as experimental

6. Which label section lists required personal protective equipment?

A) Storage and disposal
B) Precautionary statements — hazards to humans and domestic animals
C) Ingredient statement
D) First aid

7. A label states "Do not apply by air." As a drone operator you may:

A) Apply by drone because drones are not aircraft
B) Apply by drone at reduced height
C) Not apply this product by drone
D) Apply by drone with a waiver

8. The EPA registration number on a label identifies:

A) The manufacturing plant
B) The specific registered product
C) The applicator
D) The state approval

9. For a drone applicator, the most important number to check before calibrating is:

A) Net contents
B) The minimum carrier volume (GPA) and droplet-size requirement
C) The registrant address
D) The container material

Answer key & explanations

1. A) Questions about a pesticide label included with the exam — OSU Extension states most exams include questions about a pesticide label that is provided with the exam — label interpretation is the core testable skill.

2. B) CAUTION, WARNING, DANGER — CAUTION (slightly toxic) → WARNING (moderately toxic) → DANGER (highly toxic; DANGER-POISON with skull and crossbones for the highest acute toxicity).

3. B) How long workers must stay out of the treated area — The restricted-entry interval is a worker-protection interval. The pre-harvest interval (PHI) is the harvest one.

4. C) A violation — the seasonal maximum is already reached — Two applications at 2.0 pt/A total 4.0 pt/A, which exhausts the seasonal maximum. Any further application violates the label.

5. C) Not apply the product — the application would be illegal — If the site or crop is not on the label, applying the product is inconsistent with its labelling and therefore unlawful.

6. B) Precautionary statements — hazards to humans and domestic animals — PPE requirements appear in the precautionary statements addressing hazards to humans and domestic animals.

7. C) Not apply this product by drone — Ohio Category 1 treats uncrewed aircraft as aircraft. A label prohibiting aerial application prohibits drone application.

8. B) The specific registered product — The EPA registration number identifies the specific registered product (the establishment number identifies the plant where it was produced). It is a required field in Ohio application records.

9. B) The minimum carrier volume (GPA) and droplet-size requirement — Low-volume aerial application can fall below a label-specified minimum spray volume, and droplet-size class is often a legal requirement.