



NAC Executive Insights

Safety Insight: Unexploded Ordnance (UXO) Awareness

Key Points

- If you didn't drop it, don't pick it up.
- UXO can look like scrap, debris, or buried metal.
- Recognize, retreat, report—every time.
- Leave the area the same way you entered.
- One wrong touch can turn routine work fatal.

Introduction

This Executive Insight highlights the importance of unexploded ordnance (UXO) awareness in environments where past conflict, military activity, or disaster conditions may leave hidden hazards behind. It sets the stage for the key issues that follow by emphasizing the need for constant vigilance, practical recognition of suspicious objects, disciplined avoidance behaviors, and immediate reporting procedures. The goal is to reinforce a safety-first mindset so personnel understand that even objects that appear old, damaged, or harmless can present a serious and potentially fatal risk if disturbed.

THE CRITICAL MINDSET

In a post-conflict or disaster environment, the "Golden Rule" is: If you didn't drop it, don't pick it up. UXO is often unstable, weathered, and highly sensitive to movement, heat, or even radio frequencies. It does not have an "expiration date."

WHAT TO LOOK FOR

UXO rarely looks like a "bomb" from a movie. It is often camouflaged by dirt, rust, or debris. It may include:

- Finned Objects: Mortars, rockets, or grenades partially buried in soil or rubble.
- Metallic "Pipes" or "Eggs": Corroded cylinders or spheres that look like scrap metal or plumbing.
- Subsurface Indicators: Depressions in the earth, "glints" of metal in trenches, or unusual mounds of dirt.

- **Wired Hazards:** Any thin copper wire, fishing line, or nylon string that appears out of place—especially near doorways or narrow paths.

THE "4-R" FIELD PROTOCOL

If you encounter a suspicious object, follow these steps immediately:

- **RECOGNIZE:** Identify that the object is a potential hazard. STOP all work in the immediate area.
- **RETREAT:** Calmly walk back out of the area using the same path you used to enter (the "proven" safe path). Move at least 100 meters away if possible.
- **REPORT:** Notify the Site Lead or Safety Officer immediately. Provide the GPS coordinates or a clear landmark description.
- **RECOVER:** Do not return to the area until an Explosive Ordnance Disposal (EOD) team has issued a formal "All Clear."

THE "THREE DON'TS"

- **DON'T Touch:** Never kick, move, or throw anything at the object.
- **DON'T Use Radios:** High-frequency signals can trigger certain electronic fuzes. Maintain a 25-meter (80-foot) "Radio Silence" zone around the object.
- **DON'T Mark Directly:** Do not place a flag or stake right next to the UXO. Instead, mark the approach path from a safe distance to guide the disposal team.

PRE-ENTRY CHECKLIST FOR THE TEAM

- ☐ Visual Sweep: Has the immediate work zone been visually inspected before tools touch the ground?
- ☐ Stay on Path: Are vehicles and personnel sticking to established, cleared tracks?
- ☐ Illumination: Does everyone have a high-lumen light for checking "voids" or dark corners?
- ☐ Comms: Does everyone know the emergency "Abort" signal?

TEAM ACKNOWLEDGMENT

By signing below, I confirm I have been briefed on UXO identification and the 4-R protocol.

Name: _____

Signature: _____

Date: _____

For Further Reading – Other Safety Insights

- Structurally Compromised or High-Risk Zones
- Booby Trap & IED Recognition
- Environmental & Chemical Hazards
- Biological Risks & Urban Pathogens
- Mental Operational Readiness

About the Author

Bob Prieto was elected to the National Academy of Construction in 2011. He is a senior executive who is effective in shaping and executing business strategy and a recognized leader within the infrastructure, engineering, and construction industries. Bob received the 2024 ASCE OPAL Award (Outstanding Projects and Leaders) for his Outstanding Lifetime Achievement in Management.

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