National Beekeeper Emergency Response Plan:

PURPOSE: To provide a nationwide, structured response to bee transport incidents involving honeybee hives in transit, with the intent to safeguard both pollinators and the public. This plan facilitates rapid coordination between local responders, trained beekeepers, transportation services, emergency managers, and national support systems.

OVERVIEW OF BEE TRANSPORTATION: Each year, tens of billions of honeybees are transported across the United States by flatbed trucks or semi-trailers, typically stacked on pallets with 4-6 hives per pallet, netted and strapped. Loads often include 300-450 hives per truck. These bees support agriculture nationwide, and accidents involving their transport can become major environmental hazards and logistical emergencies.

First Responder Guide for Beehive Transport Accidents

PURPOSE: This document serves as a comprehensive, step-by-step response guide for first responders encountering an accident involving transported honeybee hives. It provides safety protocols, communication instructions, and emergency response procedures to protect both public health and pollinator wellbeing.

SECTION 1: INITIAL RESPONSE AT THE SCENE

1.1 SECURE THE SCENE

- Approach with caution. As you near the scene, pause at a distance and scan for signs of bee activity such as flying or clustering bees, broken hive boxes, or audible buzzing. Avoid sudden movements that may agitate bees.
- Position emergency vehicles upwind and at a safe distance (150-300 feet from hives) to minimize the risk of bees entering the vehicle or attacking personnel. If possible, park in a shaded area to avoid heat buildup in your vehicle.
- Use cones, caution tape, or barricades to reroute traffic and create a secure safety perimeter around the incident. Ensure access routes for beekeepers and other essential responders remain open.

- Prevent bystanders, media personnel, and unprotected responders from entering the affected zone. Communicate clearly and calmly about the risks involved and direct them to a designated cold zone or safe observation point.
- Consider designating a traffic controller or public liaison officer to manage bystanders and non-essential personnel.
- Check for and disable any street lights or bright flashing signs in the area if the incident occurs at night, as light can attract and confuse bees.

1.2 ASSESS SITUATION & RISKS

- Confirm the presence of honeybees through multiple indicators:
    - Observe for flying or clustering bees, especially near broken boxes or scattered frames.
    - Listen for buzzing, particularly near warm or sunny areas where bees may be congregating.
    - Scan for broken hive bodies, spilled comb, or dense clouds of bees above or around the site.
- Identify truck signage and documentation:
    - Look for placards indicating live animals or agriculture transport.
    - Check shipping paperwork for contact info, bee origin, and destination.
    - Examine hives or boxes for spray-painted numbers, QR codes, or labels linking them to a specific beekeeper or apiary.
- Determine the extent of the spill:
    - Estimate how many hives have tipped, shattered, or shifted.
    - Note whether bees appear to be swarming in the air or are grounded and crawling.
    - Identify any queen cages or marked boxes which could indicate high-value breeding colonies.
    - Look for signs of active defense behavior such as darting bees or stinging.
- Evaluate for additional hazards:
    - Diesel fuel or oil leaks that could harm bees or responders.

- Downed electrical lines creating a shock risk.
- Broken glass, sharp wood, or unsecured hive stands.
- Spilled cargo from other parts of the truck that could present biohazards or instability.
- Nearby bodies of water where bees could drown or become disoriented.
- Temperature extremes (cold snaps or heatwaves) that could affect bee survival during recovery.

1.3 ESTABLISH RESPONSE ZONES

- **Hot Zone**: This is the immediate area where active bee presence is confirmed. Entry is restricted to trained responders or registered beekeepers wearing full protective gear. Activities in this zone include direct bee rescue, hive recovery, and handling compromised equipment. Establish clear visual boundaries using cones or barricade tape. Exposure time should be minimized to reduce risk of stings or heat-related stress.
- **Warm Zone**: This intermediate buffer zone supports operations in the Hot Zone. It serves as a staging area for personnel preparing to enter the Hot Zone, as well as a drop-off point for tools, bee suits, smokers, temporary hive boxes, and medical supplies. All personnel here should be suited or preparing to suit up. This is also the ideal zone for briefings and shift rotation coordination.
- **Cold Zone**: This is the outermost area where no bee exposure is expected. It functions as the command center for incident management. EMS triage, public information officers, media representatives, and logistics coordinators should remain in this zone. First responders not suited for bee exposure and members of the public must stay here. Designate space for parking, medical treatment, documentation, and communications setup.

1.4 PERSONAL SAFETY PROTOCOL

- Do NOT enter the Hot Zone without full bee protection suit including veil, gloves, and secure closures around the wrists, ankles, and neck. Double-check zippers and velcro for proper seal before entering.
- Turn off sirens, flashing lights, radios, and unnecessary engine noise when within 300 feet of the incident. Bees can become agitated by high-frequency sound and vibrations.

- Avoid wearing scented lotions, perfumes, or aftershaves as these can attract or provoke bees. Remove any reflective jewelry or objects that may trigger defensive behavior.
- Stay calm and move slowly and deliberately. Avoid waving arms or swatting at bees. If bees begin to swarm around you, slowly walk away from the cluster without running.
- Ensure each responder has access to antihistamines, epinephrine (EpiPen), or other allergy interventions in case of stings, especially if medical history is unknown.
- In case of multiple stings:
    - Exit the Hot Zone calmly and notify the safety officer or command.
    - Remove stingers by gently scraping them out with a flat object (credit card or fingernail). Do not pinch or pull them with fingers or tweezers.
    - Apply ice or cold compress to the area to reduce swelling.
    - Monitor for signs of anaphylaxis: swelling of face/throat, difficulty breathing, dizziness, or rapid heartbeat. Administer EpiPen if needed and contact EMS immediately.
    - Document the incident and record the location, number of stings, and symptoms for medical review.

1.5 CONTACT APPROPRIATE SUPPORT

- Immediately contact your region's Beekeeper Emergency Coordinator, if registered. If you are unsure who to call, use the national hotline: (774) 295-0123. An operator will provide the nearest available beekeeper first responder based on your location.
- Attempt to contact the beekeeper listed on the shipment manifest, truck cab documentation, or directly marked on hive boxes. They may provide specific instructions for recovery or colony identification.
- If no beekeeper information is available or the contact is unresponsive, relay details (e.g., truck license plate, shipping company) to the coordinator or dispatcher to initiate a trace.
- Notify appropriate local and state agencies immediately:
    - Animal Control: to assist with containment and monitor public animal safety.

    - Agriculture Department or State Apiary Inspector: to oversee biosecurity, contamination risks, and ensure regulatory compliance.
    - Department of Transportation (DOT): to manage roadway clearance, rerouting, and accident investigation.
    - Environmental Protection Agency (if hazardous materials or pollution is involved).
    - Emergency Medical Services (EMS): if any individuals have been stung or require treatment.
- Document all contacts made, including time of call, name of person reached, and actions taken. Share this log with the on-site command post.

1.6 PREPARE FOR ARRIVAL OF BEEKEEPERS

- Maintain the established perimeter and continue to secure roadways until trained beekeepers arrive on scene. Ensure the Hot Zone remains restricted to only properly suited personnel. Reinforce safety boundaries if public traffic or curious observers approach.
- Brief all incoming units and redirect any unneeded personnel to the Cold Zone. Avoid congestion in the Warm Zone to maintain clear access for the beekeepers and their equipment.
- Prepare basic decontamination supplies and shaded resting spots for arriving personnel. If high temperatures are present, hydration and cooling resources should be readily available.
- Provide real-time situational updates to the incoming beekeeping team or regional coordinator. This should include:
    - Approximate number of hives affected or visible
    - Specific location of bee clusters or large swarms
    - Notable bee behavior (docile, aggressive, disoriented)
    - Presence of queen cages, hive identifiers, or unusual hive types (nucs, splits)
    - Current weather conditions (temperature, wind, sunlight), which may affect bee flight or recovery timing
    - Any prior attempts at containment or calming (e.g., use of smoke or sugar water)

- Assist in staging their equipment in the Warm Zone, keeping sensitive materials (queen cages, smoker fuel, hive tools) shaded and easily accessible.

POST-INCIDENT RECOVERY & MITIGATION:

Site Clearance

- Wash down the roadway using minimal water to avoid drowning surviving bees.
- Use leaf blowers, soft brooms, or bee-safe vacuums to gently clear hive debris from the traffic lanes.
- Carefully collect broken hive components and living bees into transportable boxes.
- Coordinate with local beekeepers or emergency responders to relocate recovered bees and hive pieces to safe areas.
- Identify and isolate any hives that may be contaminated or crushed beyond recovery.

Environmental & Public Health Monitoring

- Recognize that bees may linger for days following the incident; deploy bait hives in the area to safely attract and contain them.
- Monitor the surrounding community for reports of bee activity or stings.
- Notify local hospitals and clinics to be prepared for possible allergic reactions and to report any uptick in bee-related incidents.
- Track the weather and wind direction, as they influence bee dispersal and behavior post-incident.

Public Communication

- Alert nearby residents to avoid the affected area, especially at night when outdoor lights may attract disoriented bees.
- Place signs or electronic message boards warning of lingering bee presence.
- Share educational materials with the community on what to do if they encounter stray bees or hive parts.
- Provide a hotline or contact email for the public to report stray hives, bee activity, or stings for follow-up response.

Reporting & Review

- The National Beekeeper Emergency Network will record the incident, including type and scale, recovery effectiveness, environmental concerns, and beekeeper involvement.
- All participating agencies and individuals should complete detailed After Action Reports (AARs) that include timelines, decisions made, responder safety notes, and equipment effectiveness.
- Conduct a debrief session ("hot wash") as soon as practical, gathering input from all roles: first responders, beekeepers, command officers, EMS, and DOT personnel.
- Use gathered insights to refine local and national protocols, improve responder training, and update public communication templates.
- Submit all compiled reports to the national response plan database for long-term analysis and development of improved mitigation strategies.

CLOSING STATEMENT: Honeybees are essential partners in our food supply and natural ecosystems. This plan aims to honor that truth while providing a realistic, coordinated, and humane response to the accidents that can and do occur. Through education, preparedness, and teamwork, we can protect pollinators and people alike.