

BEEKEEPING SAFETY PROGRAM

THE UNIVERSITY OF TEXAS AT SAN ANTONIO

OFFICE OF RESEARCH INTEGRITY
LABORATORY SAFETY DIVISION

UTSA Laboratory Safety

I. INTRODUCTION

A. PURPOSE

The University of Texas at San Antonio Laboratory Safety Division in partnership with Environmental Health, Safety and Risk Management and the Department of COS Integrative Biology has developed this beekeeping safety program to provide guidance to UTSA faculty, staff and students participating in beekeeping activities and research.

B. SCOPE

This program applies to all UTSA faculty, staff and students who participate in beekeeping activities or research. This document describes the potential risks, training requirements, personal protective equipment and emergency procedures.

C. RESPONSIBILITIES

1. Laboratory Safety Division

1. Maintain the program document and review on an annual basis.
2. Keep a copy of all required training.
3. Periodically inspect the research site for adherence to SOPs.
4. Provide advice on personal protective equipment, general safety and assist with incident investigations.

2. Environmental Health, Safety and Risk Management

1. Review the program documents on an annual basis.
2. Provide health and safety recommendations, identify training requirements.
3. Investigate incidents, illness and injuries as necessary.
4. Provide first-aid (minor injuries) for employees through the Occupational Health Program.

3. Student Health Services

1. Provide first-aid (minor injuries) for students. Student Health Services is open between 8am – 5pm.
2. Notify the Laboratory Safety Division and EHSRM if there is a research related bee sting, where appropriate.

4. Department of COS Integrative Biology

1. Designate a head beekeeper for the hives.
2. Ensure that faculty, staff and students adhere to the minimum requirements of the program.
3. Maintain training records.
4. Notify the Laboratory Safety Division, EHSRM and Facilities prior to acquiring more beehives.
5. Notify the UTSA Police Department of the location of beehives in case of emergency.

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5. Head Beekeeper

1. Ensure that all participants are aware of the minimum requirements of this program.
2. Adhere to the minimum requirements of this program.
3. Notify the sponsoring department of any changes to the program.
4. Maintain all relevant training.
5. Reporting any incidents or injuries to Laboratory Safety and EHSRM.

6. All other faculty, staff and students engaged in beekeeping activities

1. Adhering to the minimum requirements of this program.
2. Notifying the supervisor and or head beekeeper of any incidents, stings or injuries.

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II. MINIMUM TRAINING REQUIREMENTS

All participants who will be involved in beekeeping activities or research must complete the following training:

1. Texas Beekeeping Course as determined by the Head Beekeeper
2. SA0475 – Heartsaver First Aid, CPR and AED (includes use of an EpiPen)
3. Fire awareness training (contact John DeLaHunt, EHSRM)
4. Project specific training provided by the supervisor and head beekeeper.

III. REQUIRED PERSONAL PROTECTIVE EQUIPMENT (PPE)

Appropriate PPE must be worn while beekeeping in the research area:

1. Beekeeping veil
2. Beekeeping gloves
3. Light colored clothing
4. Long sleeved shirt
5. Long pants (tucked into socks)
6. Close-toe shoes

IV. ADDITIONAL EQUIPMENT REQUIRED

The following equipment is required when beekeeping:

1. Smoker
2. A water extinguisher, such as a Collapsible Fire Tank Bag, with a pump within 50 feet of where the smoker will be used.
3. First Aid Kit
4. Cell Phone (recommended that the Live Safe communication app is installed)

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V. HAZARDS AND GENERAL PROCEDURES

The following are common hazards and procedures associated with beekeeping and should be considered whenever handling bees or hives:

A. GENERAL HAZARDS

These include, but are not limited to:

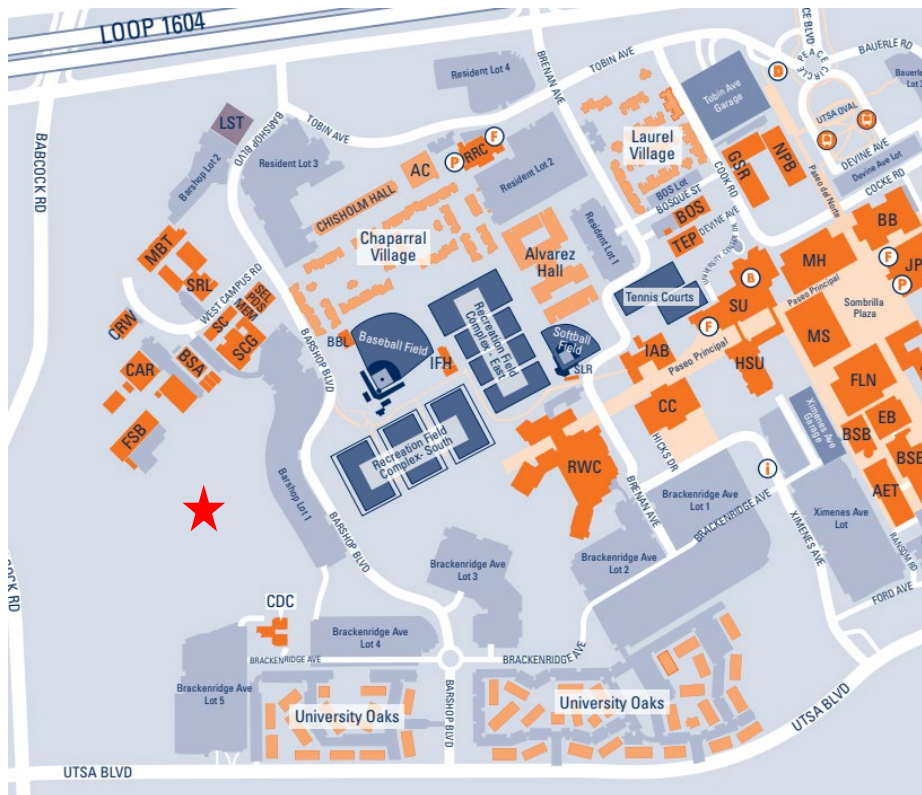
1. Stings and potential allergic reaction to bee venom.
2. Burns and fire hazards associated with the use of a smoker.
3. Injuries related to improper lifting techniques when moving hives.
4. Sharps injuries from equipment or debris.

B. PLACEMENT OF BEEHIVES

The beehive may not be relocated from its current site without first obtaining permission from the UTSA Office of Facilities. Any additional beehives must be approved prior to their acquisition.

1. Hive Location

The UTSA Bee Research Program Bee Hive is located 50 yards southeast of the Facilities Services Building (FSB) on West Campus. The research site is away from regularly traveled paths and is not clearly visible to passers by.



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Figure 1. Location of UTSA Bee Research Program Bee Hive Location

2. Signage

The following signage should be posted in the designated research area to indicate that there is a hive present:

CAUTION: ACTIVE BEE HIVE AND RESEARCH: DO NOT DISTURB

C. GENERAL GUIDANCE

1. Any individual with a known or suspected allergy to bee venom must seek appropriate advice from their primary care physician prior to conducting beekeeping or research activities with bees. In addition, any individual with a known or suspected allergy to bee venom must notify the head beekeeper, their direct supervisor and research partner. Any individual prescribed an EpiPen for bee allergies must carry it with them while working in this area.
2. Individuals with a known or suspected allergy to bee venom must work with a partner and not handle hives or bees alone.
3. A cell phone must be easily available at all times when working with hives.
4. Individuals working in the research area should wear light colored clothing and avoid wearing fragrance to minimize the risk of attracting bees.
5. Prior to lifting boxes individuals should ensure they understand proper lifting techniques and be aware that the box may weigh between 30-50lbs when filled with honey.

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VI. USE OF A SMOKER

Smokers are used to calm bees prior to handling a hive or conducting checks and maintenance. Smokers are a potential fire hazard and should be used with care according to the following instructions:

1. Before using a smoker ensure a water is available within at least 50 feet of your work site.
2. Load the smoker with dry fuel (such as paper or bark) only. Use a small amount of material to establish a fire then add more fuel if necessary.
3. When the smoker is not in use it must be placed in a metal container away from any combustible material. A smoker should never be placed directly on dry grass.
4. Keep the barrel of the smoker pointed away from you while in use to minimize eye irritation and burns.
5. Verify that the smoker is completely extinguished after use by dumping smoldering contents into a bucket of water. Store the smoker in a metal container.

VII. FIRST AID AND EMERGENCY RESPONSE

Reactions to bee stings can be varied and a first aid kit should be readily available. Reactions can include:

- **NORMAL:** Pain, redness, itching and swelling at the sting site.
- **MILD TO MODERATE:** Persistent pain which may spread, itching, swelling, redness and large areas of pain around the sting site.
- **SEVERE (ANAPHYLAXIS):** Difficulty breathing, swelling of the tongue and/or throat, wheezing, coughing, difficulty talking or swallowing, dizziness, abdominal pain, vomiting or collapse.

A. STING RESPONSE

- Remain calm
 - Avoid swatting at bees
 - Slowly move away from the area of the hive
 - Protect your face and eyes
 - Attempt to move to a building or vehicle to treat the sting(s)
1. Remove the stinger as soon as possible by scraping it from the skin. Do not delay removal of the stinger.
 2. After removal of the stinger, the affected area should be washed with soap and water. Antihistamine cream and an ice pack can be used to relieve localized itching and swelling.
 3. If itching persists oral antihistamines may relieve symptoms, seek medical attention if symptoms persist or worsen.

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4. Following a sting employees can contact Occupational Health for assistance, students should contact Student Health Services.
5. In the event that an individual begins to show signs of a mild to severe reaction immediately call UTSA Police Department x4911 and clearly state that this is a **medical emergency and EMTs are required**. Locate an epinehrine auto-injector if present, such as an EpiPen and use it if symptoms worsen.

B. REPORTING REQUIREMENTS

1. Employees

1. Employees must notify their supervisor / head beekeeper immediately if an injury or illness occurs.
2. Employees can visit Occupational Health for assistance in the event of a minor injury.
3. Within 24hrs the supervisor and employee must complete a First Report of Injury/Illness form (<http://www.utsa.edu/safety/#/workplace/wci>).
4. The employee or supervisor must also notify the Laboratory Safety Division of the incident.

2. Students

1. Students must notify their supervisor / head beekeeper immediately if an injury or illness occurs.
2. Students should be directed to Student Health Services for treatment of minor injuries.
3. Within 24hrs the student or supervisor / head beekeeper should then notify the Laboratory Safety Division of the incident.

The Occupational Health Clinic and Student Health Services are available Mon – Fri between 8am – 5pm. Outside of these hours individuals should go to the nearest walk in clinic (for example. Texas Med Clinic on 1604)

VIII. REGULATIONS

Beekeeping is regulated in the State of Texas through [Texas Agriculture Code, Chapter 131: Bees and Honey](https://statutes.capitol.texas.gov/Docs/AG/htm/AG.131.htm) (<https://statutes.capitol.texas.gov/Docs/AG/htm/AG.131.htm>). Individuals responsible for maintaining the UTSA colony must be familiar with the requirement of these regulations.

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CONTACTS

NAME	TITLE	TELEPHONE NUMBER
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Jolyn Demarest	Occupational Health Coordinator	210-458-4038
John DeLaHunt	Risk and Life Safety Manager	210-458-4420
Beth Wichman	Chief Medical Officer, VPBA-Admin and Operations	210-458-4142

EMERGENCIES

UTSA Police Department **210-458-4911** (from cell phone or outside line) **x4911** from a UTSA phone