Environmental Health and Safety
2020
Annual Report

Because we care about people, property, and the environment.

UNC Charlotte
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Introduction

Although, this has been an unprecedented year, the Office of Environmental Health and Safety (EHS) has remained steadfast to its commitment of providing the University community with a safe and healthy working, teaching, and learning environment. This was accomplished by creating an atmosphere of safety and health awareness through compliance program development, safety assessments, training, investigations, inspections, and campus community engagement. Each Environmental Health and Safety program is designed to comply with local, state and federal regulations while recognizing and adjusting to the dynamic needs of UNC Charlotte.

Throughout the year, the Environmental Health and Safety (EHS) office has continued to work closely with many campus departments. These collaborations have increased the demand for safety services, especially consultative assessments and training. The EHS office responded to the demand with an emphasis on customer service and professional expertise. This new focus was the cornerstone to building stronger relationships and maintaining regulatory compliance.

As a result, there were no regulatory agency monetary penalties issued to UNC Charlotte and multiple cost-effective safety solutions were implemented. Thereby, reducing the compliance burden on faculty, staff and administration.

The 2020 calendar year report illustrates our commitment to ensuring occupational regulatory compliance and managing hazards that pose a risk to people, property and the environment.
The University of North Carolina at Charlotte is committed to providing a safe and healthy working, teaching, learning, and living environment for all members of and visitors to the University community. This commitment involves the creation of an atmosphere of safety and environmental health awareness through training and faculty, staff, and student involvement. The University is also committed to voluntary compliance with all applicable federal, state, and local safety, health, and environmental regulations and codes as an integral part of our total management process.

All members of the University community share the responsibility for this program and for the identification and elimination of known hazards. The full cooperation of each individual is required to preserve the safety and health of self and others. The following principles form the foundation for our approach to Environmental Health and Safety:

- Each University employee is responsible for Environmental Health and Safety and for compliance with applicable University policies, procedures, and programs.
- The University shall provide the necessary resources and training to meet environmental health and safety regulatory compliance objectives.
- The University shall identify workplace and job performance environmental health and safety deficiencies and take corrective action.
- The University shall investigate near miss and injury incidents as part of a comprehensive incident prevention program.
- The University shall require contractors to abide by applicable University requirements and maintain Occupational Health and Safety Administration (OSHA) regulatory requirements.
- The University shall promote environmental health and safety through the development and support of safety committees appointed to address specific needs of the University community.

Sharon L. Gaber  
Chancellor
Who We Are

The Environmental Health and Safety office is an operating unit within the division of Business Affairs under the direction of the Associate Vice Chancellor of Safety and Security. We support the success of student education, university research and general safety by providing services to ensure regulatory compliance and a safe campus environment.

MISSION

It is our mission to ensure compliance with occupational regulations and manage hazards that pose a risk to people, property, and the environment.

VALUES

Communication: Actively informing customers about EHS services and regulatory compliance requirements.

Collaboration: Working as a team to provide the most practical comprehensive environmental, health and safety solutions.

Commitment: Dedicated to reflecting the positive actions, attitudes and behaviors of a proactive safety culture.
Environmental health and safety provides consultative and enforcement services to the entire campus community. We work to build relationships and form partnerships to comply with various regulatory agency requirements such as: Occupational Safety and Health Administration (OSHA), Environmental Protection Agency (EPA), North Carolina Department of Health and Human Services (NCDHHS) Radiation Protection, NCDHHS Sanitation, Department of Insurance (DOI) State Fire Marshal, and local municipalities.

Vision
To support and empower the campus community to proactively integrate environmental health and safety programs into teaching, research and service activities.

Partnerships

**Academic Affairs:** Supported the University Business Partner and Niner Elementary by conducting workplace hazard assessments to assist with safe start-up.  

**Advancement:** Supported crisis communication by offering technical safety information.  

**Athletics:** Supported athletic events by conducting COVID-19 workplace assessments for indoor athletic events.  

**Business Affairs:** Supported the integration of compliance requirements into the OnSite and Percipio learning experience technology systems to maximize efficiency.  

**Institutional Integrity:** Supported the remediation of outstanding building and fire safety compliance issues to reduce the risk to campus.  

**Student Affairs:** Supported the student living and engagement experience by conducting several building inspections, fire drills and outreach programs.
Highlighted Accomplishments

**Safety Services**
Provided 2,208 safety services to the campus community to ensure regulatory compliance and prevent injuries amid the COVID-19 pandemic.

**Respiratory Protection**
Conducted fit testing to ensure proper fitting and usage of N-95 and half-face respirators to over 160 faculty, staff, and students working in environments with potential COVID-19 exposure.

**Safety Training**
Through an enhanced web-based and classroom training system, EHS administered 24,537 trainings to faculty, staff, and students.

**Decreased Cost of Injury Incidents**
Led the injury and illness prevention program that reduced the injury cost by approximately $302,000.

**Reduced OSHA Recordable Rate**
The EHS Injury and Illness Prevention Program has helped sustain a below average OSHA injury recordable rate calculated at 0.40. Well below the educational institution average of 1.7.

**Hazardous Waste Removal**
Through the Vice Chancellor of Business Affairs funded Hazardous Waste Initiative, EHS worked with campus partners to remove over 9,000 pounds of hazardous waste from the UNC Charlotte campus.

**Laboratory Safety**
Conducted 102 Laboratory Inspections and Safe Shutdown Assessments

**Launched Fire Safety and Building Emergency Evacuation Training**
The collaboration of EHS with multiple departments resulted in a 92% completion rate of required compliance training for all faculty and staff.
### Service Reports

<table>
<thead>
<tr>
<th></th>
<th>Count</th>
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<tbody>
<tr>
<td>Property Safety Assessments</td>
<td>980</td>
</tr>
<tr>
<td>Occupational Health Assessments</td>
<td>129</td>
</tr>
<tr>
<td>Emergency Preparedness</td>
<td>280</td>
</tr>
<tr>
<td>Investigations</td>
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<tr>
<td>Inspections</td>
<td>650</td>
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<tr>
<td>Audits</td>
<td>19</td>
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<tr>
<td>Other</td>
<td>140</td>
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<tr>
<td><strong>Total</strong></td>
<td>2,122</td>
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</table>

### Training Attendance

<table>
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<th>Count</th>
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</thead>
<tbody>
<tr>
<td>Classroom</td>
<td>1,656</td>
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<tr>
<td>Online Platforms</td>
<td>22,881</td>
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<tr>
<td><strong>Total</strong></td>
<td>24,537</td>
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</table>

### Incident Reports

<table>
<thead>
<tr>
<th></th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Treatment</td>
<td>39</td>
</tr>
<tr>
<td>First Aid/Report Only</td>
<td>13</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>52</td>
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</tbody>
</table>

### Total Services Provided by Division

- **Academic Affairs** (55.45%)
- **Student Affairs** (23.76%)
- **Business Affairs** (15.84%)
- **Athletics** (2.97%)
- **University Advancement** (0.99%)
- **Office of the Chancellor/Intuitional Integrity** (0.99%)

### Total Training by Safety Environment

- **Fire Safety** (64%)
- **Health & Safety** (7%)
- **Safety & Claims** (24%)
- **Laboratory and Research Safety** (5%)

### Total Incidents by Quarter

- **1st Quarter**: 15 incidents
- **2nd Quarter**: 10 incidents
- **3rd Quarter**: 10 incidents
- **4th Quarter**: 10 incidents

- **Medical**
- **First Aid/Report Only**
The Environmental Health and Safety office serves as the primary liaison for external environment, health and safety regulatory agencies. These agencies conduct unannounced and announced inspections to ensure the University is providing a safe and healthy environment. During calendar year 2020 the University was inspected by three regulatory agencies resulting in no monetary penalties. The following summarizes the regulatory agency inspections for calendar year 2020.

<table>
<thead>
<tr>
<th>External Agency</th>
<th>Compliance Programs Inspected</th>
<th>Penalties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office of State Human Resources (OSHR)</td>
<td>Injury and Illness Program</td>
<td>NONE</td>
</tr>
<tr>
<td></td>
<td>Personal Protective Equipment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Electrical Safety</td>
<td></td>
</tr>
<tr>
<td>Department of Insurance Office of State Fire Marshal (DOI)</td>
<td>North Carolina Fire Prevention Code</td>
<td>NONE</td>
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<tr>
<td></td>
<td>Building Fire Protection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Building Evacuation Plans</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Building Safety</td>
<td></td>
</tr>
<tr>
<td>North Carolina Department of Health and Human Services (NCDHHS)</td>
<td>Building Sanitation</td>
<td>NONE</td>
</tr>
<tr>
<td></td>
<td>Swimming Pool Sanitation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Athletic Spa Sanitation</td>
<td></td>
</tr>
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</table>
In January 2020 the University started elevating the potential risk of this pandemic throughout campus divisions. EHS began ramping up emergency preparedness procedures to initially address students, faculty and staff in health care work settings. This work evolved to all sectors of the organization in early March when we realized this had become a global pandemic. Keeping our students, faculty and staff safe and healthy from COVID-19 became our main operational objective. This span into multiple cross functional operational teams to address quarantine, isolation, disinfection, air quality, personal protective equipment, respirators, signage, training, medical surveillance, and crisis communication.

Keeping our students, faculty and staff safe meant collaborating with external vendors to supply PPE and other needed safety equipment. Given the virus was mainly spreading through respiratory droplets our primary concern was respiratory protection, which required adjusting our respiratory protection procedures to manage the safety of EHS staff. EHS performed 160 respiratory fit test and training sessions to reduce the risk to many students, faculty and staff members. EHS also implemented a web-based Percipio training program that was provided to the campus community.

Additionally, EHS assisted with wastewater testing, incident management team, face mask distribution, campus wide COVID-19 awareness training, PPE distribution, review of multiple department reopen plans, regulatory guidance reviews, and COVID-19 workplace hazard assessments. Although we know the pandemic has not passed, we stand committed to supporting our campus community with mitigating this hazard.
Forecast

The past year has been unprecedented given the response of the University to the COVID-19 pandemic. Throughout this year we have faced the challenges of work scheduling, service delivery models, task prioritization, budget and general fatigue. However, we were resilient at facing these challenges head-on and renewing our commitment to changing internal processes through innovation.

Two of the most profound internal innovations have been the Percipio learning experience system and OnSite information technology system. These systems have reduced the regulatory compliance burden by making services more readily accessible and managing data in a more efficient manner.

The OnSite information technology system was piloted throughout 2020 for safety service requests, hazard reporting, and hazardous waste disposal. The system is designed to innovate outdated paper processes into a user friendly electronic process. Although we are in the early stages of implementing this system, we have already observed the efficiency in allowing researcher the ability to remotely access EHS compliance data.

Using the Percipio system, we launched web-based EHS compliance training, injury prevention training and general awareness safety training. We piloted the EHS compliance training with various departments, launched the COVID-19 training, Fire Safety and Building Emergency Evacuation training sessions. The Fire Safety and Building Emergency Evacuation trainings were the first mandatory web-based training programs to ever be launched in EHS. The training course has netted a campus wide 92% completion rate.

As we continue to innovate, we identify the need to better manage current talent and acquire new talent so that we may further transition processes. We observed this need profoundly during the pandemic. EHS requested the assistance of OneIT and other partners to create instructional design, develop technology exchanges, communicate and process multiple data points to implement the COVID-19 web-based training course. Additionally, we observed this same trend during the OnSite implementation. Therefore, I would attest the major challenge going forward will be the acquisition and retention of EHS education and technical professionals.

As the campus continues to adapt to the COVID-19 pandemic, new academic instructional models, housing, and athletic programs shift, the portfolio of EHS requested services will continue to grow. We are committed to overcoming these challenges with the support of the campus community. Together, we will provide a safe and healthy environment for students, faculty, staff and visitors to enjoy!