



THE UNIVERSITY  
*of* NORTH CAROLINA  
at CHAPEL HILL

# University Safety and Security Meeting December 3, 2015



# Agenda

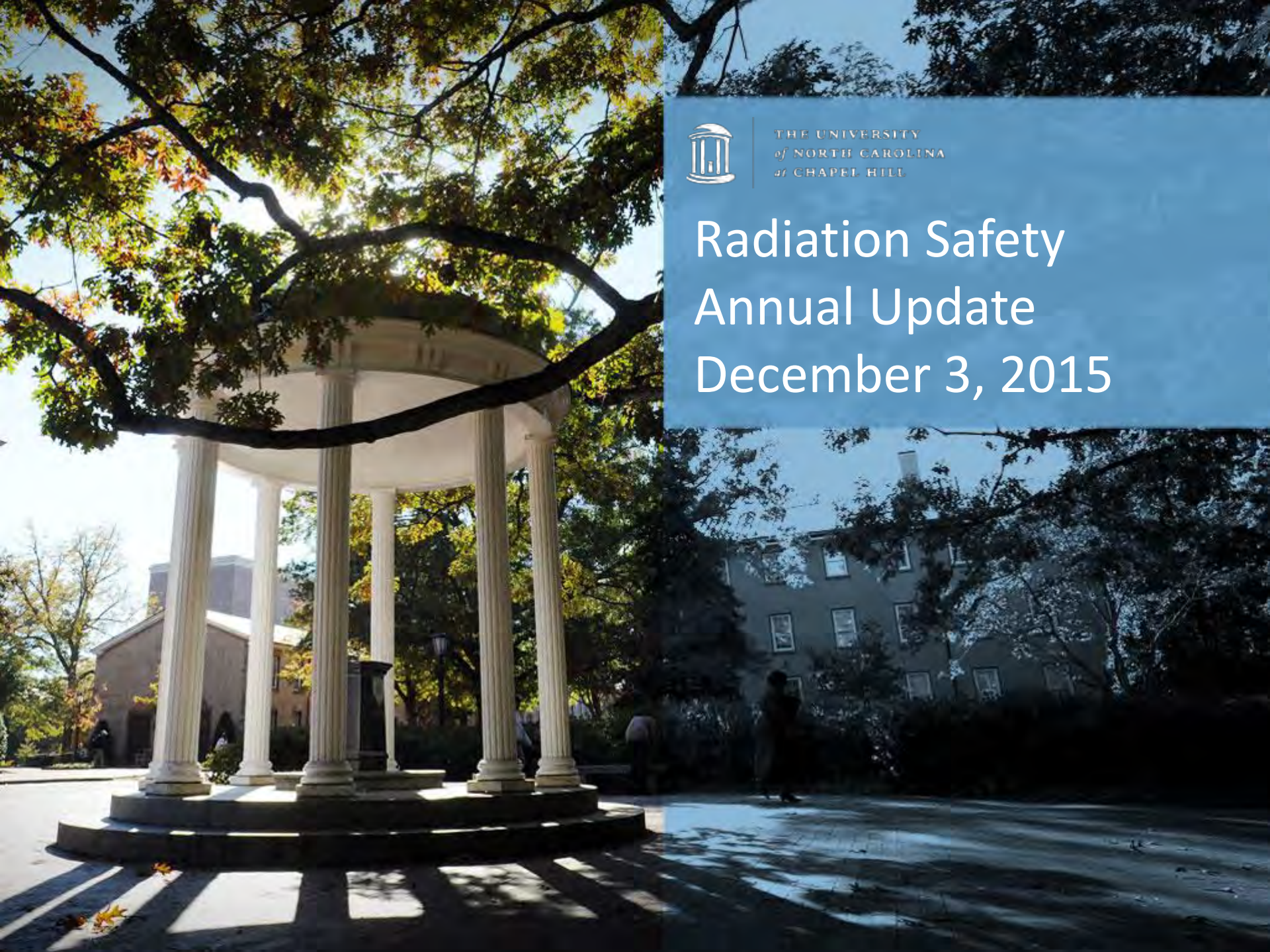
- Introductions All
- Radiation Safety Annual Update Jonathan Moore
- Fire Safety & Emergency Response Annual Update David Guynn
- Security Initiatives Update – Recent Lighting Tour Jeff McCracken and Derek Kemp





THE UNIVERSITY  
of NORTH CAROLINA  
at CHAPEL HILL

# Radiation Safety Annual Update December 3, 2015



# Licensing Activities

- Administration of 8 radioactive material licenses. 2 licenses required renewal this year (2015).
  1. UNC Academic Accelerator License: Expired September 30, 2015; in timely renewal status
  2. UNCH Medical Broad-scope License: Expired October 31, 2015; in timely renewal status
  3. 5 licenses were renewed in 2014; 1 license in good standing



# Inspections Over Last 12 Months

1. Medical Broad-scope License Inspection (December 2014).  
**No citations or violations**
2. Academic Broad-scope License Inspection (August 2015).  
**No citations or violations**
3. Six X-ray Registration Inspections
  1. UNC Healthcare Spine and Imaging Center; **No citations or violations**
  2. UNC Campus Health; **No citations or violations**
  3. UNC Healthcare ACC; **5 items of non-compliance, resolved**
  4. UNC Cancer Hospital; **No citations or violations**
  5. UNC Healthcare Hillsborough; **No citations or violations**
  6. Mammogram Quality Standards Act (MQSA) for 3 of above;  
**No citations or violations**



# New Particle Accelerator

- New 17 MeV Cyclotron was licensed and began operation in 2015.
- Located in sub-basement of Marsico Hall.
- Dedicated Health Physicist was hired to support the facility.
- Cyclotron facility includes associated non-human use radiochemistry labs (with 7 hotcells), human use radiochemistry labs (with 2 hotcells), and QA/Analytical labs.
- Production of human use radiopharmaceuticals have not yet begun.





THE UNIVERSITY  
of NORTH CAROLINA  
at CHAPEL HILL

# Fire Safety and Emergency Response Annual Update 2015



# Fire Safety and Emergency Response

- Who we are:
  - Fire Marshal: David Guynn
  - Fire Safety Professional: Kitty Lynn
  - Fire Safety Professional: Adam Swift
  - Fire Safety Professional: Vacant (recruiting)
- What we do:
  - Inspections and Testing
  - Enforcement
  - Education
  - Engineering/Plan Review
  - Fire Investigations
  - Emergency Response





# Current Goals: AY 2015-16

- Departmental Emergency Action Planning
- Hot Work Program and Process Improvement
- Fire Extinguisher Maintenance Program Enhancements
- Fire Safety at University Events
- Fire Drill Continuous Improvement



# Departmental Emergency Action Planning

- Several requirements for emergency planning outside of the University EOP
  - OSHA-mandated Emergency Action Plan for employees
  - Fire Safety and Evacuation Plans for all building occupants
- Fire Safety is working with departmental Emergency Coordinators to gather information for department/work unit level emergency planning
- These plans will also assist the fire department during emergency responses.



# EAP Deliverables

## IV. Employee Evacuation and Accountability Points

Employee evacuation may be required during emergency incidents. Incidents that may require evacuation include:

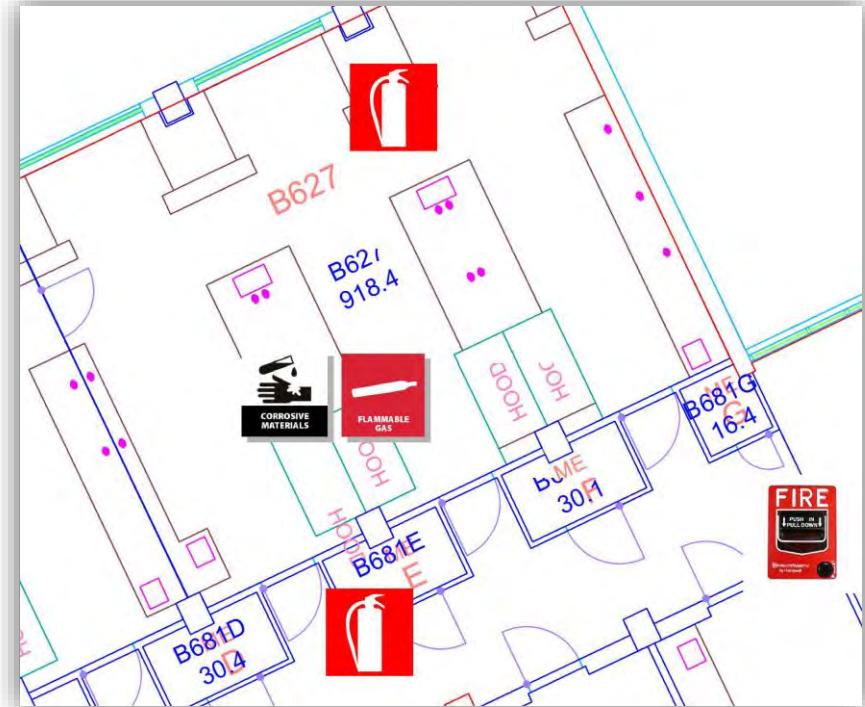
- Fire
- Explosions
- Weather incidents/emergencies
- Release of toxic/hazardous materials

Evacuation points should be located at least 50 feet away from the building.

Each building occupied by a department or work unit must have at least one emergency evacuation and accountability point.

An emergency coordinator or other employee ("floor monitors") should be assigned to each evacuation point to ensure that all departmental employees are safe and accounted for.

Building or Area within a Building	Evacuation and Accountability Location	Person Responsible for Accountability



# Hot Work Program/Process Improvement

- Hot work is defined as “work involving burning, welding, or a similar operation that is capable of initiating fires or explosions”
- This kind of work occurs within UNC facilities on a daily basis
- Industry best practice is that hot work requires a permit, describing the location, type, and parameters of the work to be performed
- Our goal is to create an electronic permitting process



# Hot Work Program/Process Improvement

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

## HOT WORK PERMIT

THIS PERMIT IS USED FOR HEAT GUNS, GRINDING, CUTTING, WELDING OR SOLDERING WITH PORTABLE GAS, ARC, OR OTHER EQUIPMENT USING HEAT OR SPARK (2012 NC FIRE CODE CHAPTER 26, NFPA STANDARD 51B)

**BEFORE INITIATING HOT WORK: CAN THIS ACTIVITY BE AVOIDED? IS THERE A SAFER WAY?**

**SECTION I: JOB INFORMATION**

DATE:  SHOP #:  WORK ORDER #:

BUILDING:  FLOOR/ROOM #:

DESCRIPTION OF WORK:

PAI NAME:  PID:  TEL #s:

HOT WORK SUPERVISOR:  PID:  TEL #s:

**EMERGENCY CONTACT**

NAME:

CONTACT #:

**SECTION II: FIRE WATCH REQUIREMENTS**

IF THE ANSWER TO **ANY** OF THE FOLLOWING QUESTIONS IS YES, THEN A QUALIFIED FIRE WATCH IS REQUIRED.

1.  (yes or no) Are combustible materials in building construction closer than 35 feet to the point of operation?

2.  (yes or no) Are combustibles more than 35 feet away but would be easily ignited by sparks?

3.  (yes or no) Are wall or floor openings within a 35 foot radius exposing combustible material in adjacent areas including concealed spaces in floors or walls?

- The permit will be completed online
- Individuals will be required to certify that they have taken precautions to reduce the risk of fire
- Information about the planned work will be electronically distributed to the Fire Department and University stakeholders




# Fire Extinguisher Maintenance Program Enhancements

- The University has over 8000 fire extinguishers located across campus
- Fire code requires these extinguishers to be maintained on an annual basis and inspected on a monthly basis
- Fire Safety performs annual maintenance, supported by work study students



# Fire Extinguisher Maintenance Program Enhancements

NOT TO BE REMOVED BY ORDER  
OF THE UNIVERSITY FIRE MARSHAL

 THE UNIVERSITY  
of NORTH CAROLINA  
at CHAPEL HILL

ABC DRY CHEM  
 BC CO<sub>2</sub>  
 D DRY POWDER

JAN  
 FEB  
 MAR  
 APR  
 MAY  
 JUN

**ANNUAL INSPECTION**

INSPECTOR

FOR SERVICE CONTACT  
(919) 962-5708

**2016**

DEPARTMENT OF ENVIRONMENT,  
HEALTH AND SAFETY

<http://ehs.unc.edu>

DATE	INSP.

- Currently, monthly inspections are only performed by departments with specific regulatory requirements
- Fire Safety will begin working with other high-risk areas in 2016 to begin a monthly inspection program
  - Research laboratories
  - Housing
  - Student Union



# Fire Safety at University Events

- Fire Safety has historically been involved with a variety of University events, from football and basketball to commencement
- Normally functions as a “fire watch” during events when the fire alarm system has been impaired





# Fire Safety at University Events

- During the 2015 football season, Fire Safety has integrated within the Chapel Hill Fire Department command structure during games
- Allows for information sharing and joint response to incidents
  - Fireworks
  - Press box odor response



# Fire Drills/Continuous Improvement

- Fire drills are conducted at least annually in all University buildings
- Fire drills within student housing are conducted four times annually
  - At least one drill must be within the first ten days of the semester
  - One drill must be conducted “after-hours”



# Fire Drills/Continuous Improvement

- We are collecting data from all fire drills to facilitate continuous improvement – not just “checking the box”

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL FIRE DRILL RECORD		
Date:	Time:	After sunset? <input type="checkbox"/>
Building:		
Building Occupancy Class: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> R-2 <input type="checkbox"/> Other:		
FS Drill Manager:		
<b>Drill Information:</b>		
Initiation Method: <input type="checkbox"/> Staff Initiation <input type="checkbox"/> Student Initiation <input type="checkbox"/> Other (note in comments)		
Drill Start Time:		Drill End Time:
Total Drill Time:		Number of occupants evacuated:
Weather Conditions:		
Special Conditions Simulated:		
FS Staff Members Participating:		



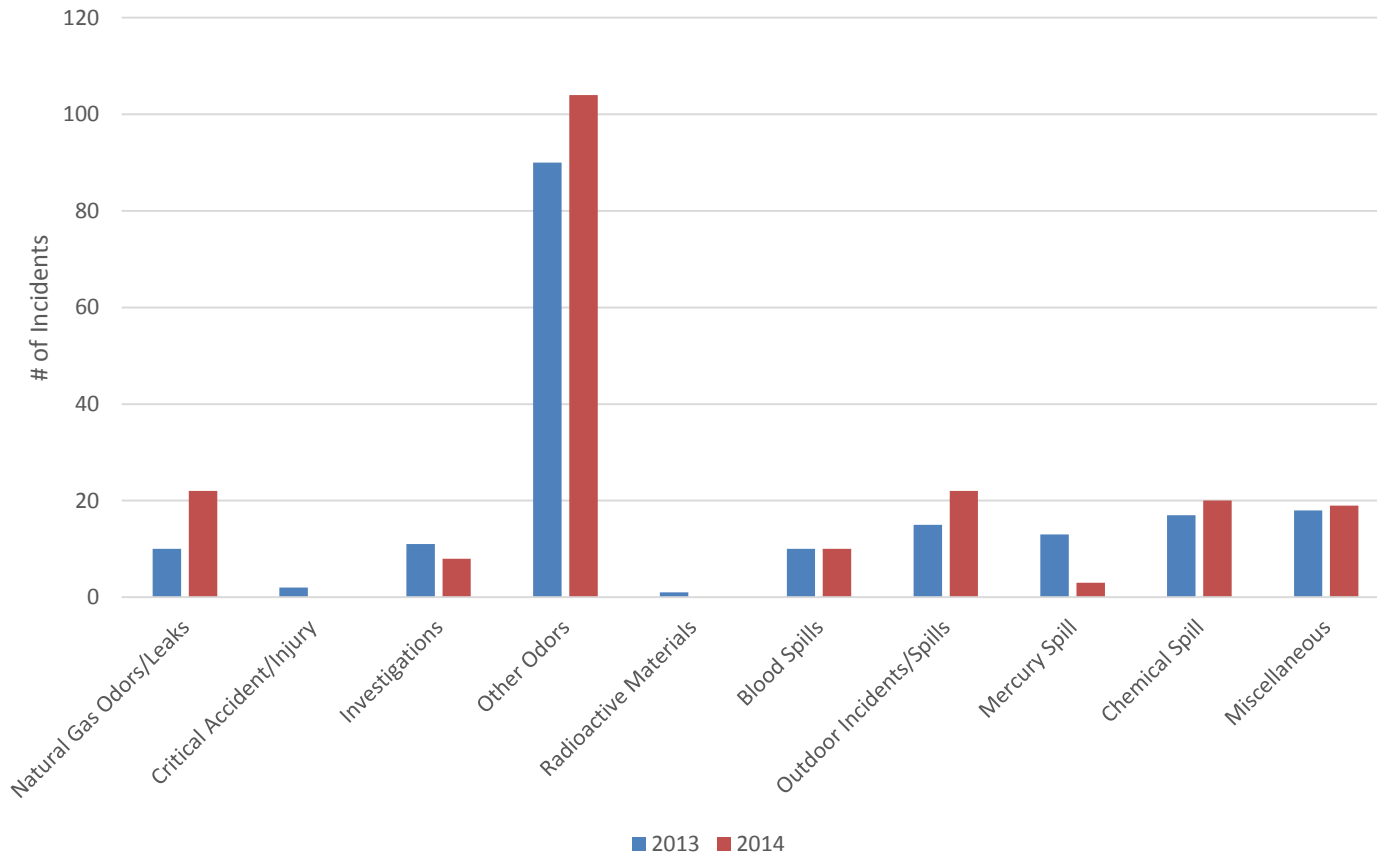
# Emergency Response

- Environment, Health and Safety has sponsored a Hazardous Materials Emergency Response Team since 1995
- The ERT responds to spills, odors, and other hazardous conditions across campus
- Training is currently held monthly – transitioning to a quarterly training model which will allow for higher-quality training opportunities



# Emergency Response Metrics

ERT Responses: 2013 vs. 2014



2013 total: 187  
2014 total: 208



# Fire Incidents and Alarms

- Fire Safety tracks all fire department responses to UNC Chapel Hill
- Primary goal: Reduce the number and mitigate the impact of fires and fire alarms on campus
- Fire Safety is also responsible for:
  - the University’s compliance with the Town of Chapel Hill False Alarm Ordinance
  - Clery Act (Fire Safety) reporting and compliance
  - Fire Investigations (ex: Cobb Residence Hall)



# Town of Chapel Hill False Alarm Ordinance

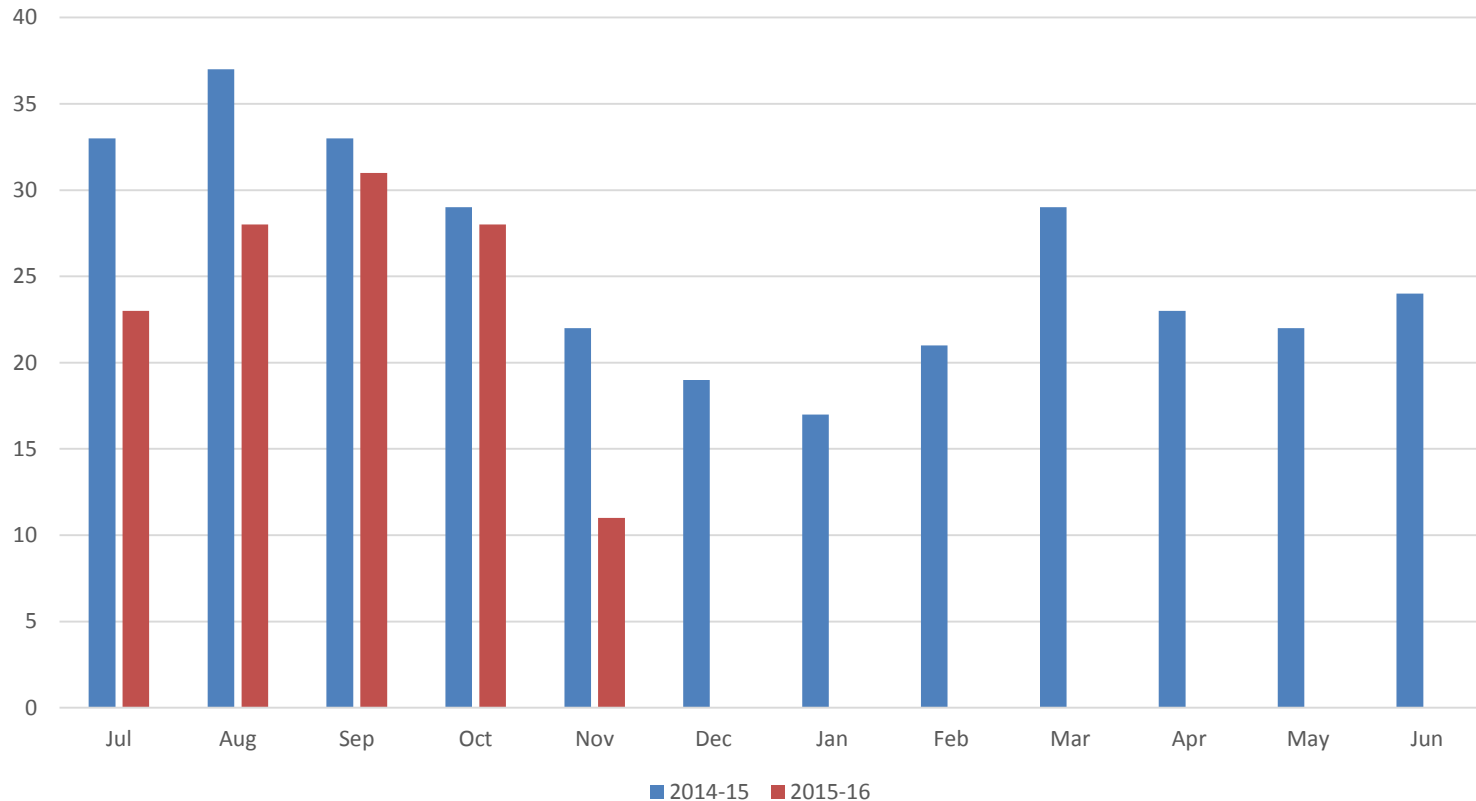
- Beginning on July 1, 2014, the Town of Chapel Hill implemented an ordinance to reduce the number of accidental fire alarms
- The Town imposes civil penalties for excessive accidental activations:

Breakdown of payment per false alarm citation	
Number of false alarms	Penalty
1 to 3	\$0
4 to 5	\$100
6 to 7	\$200
8 to 9	\$300
10 plus	\$500 each



# Fire Incident Metrics

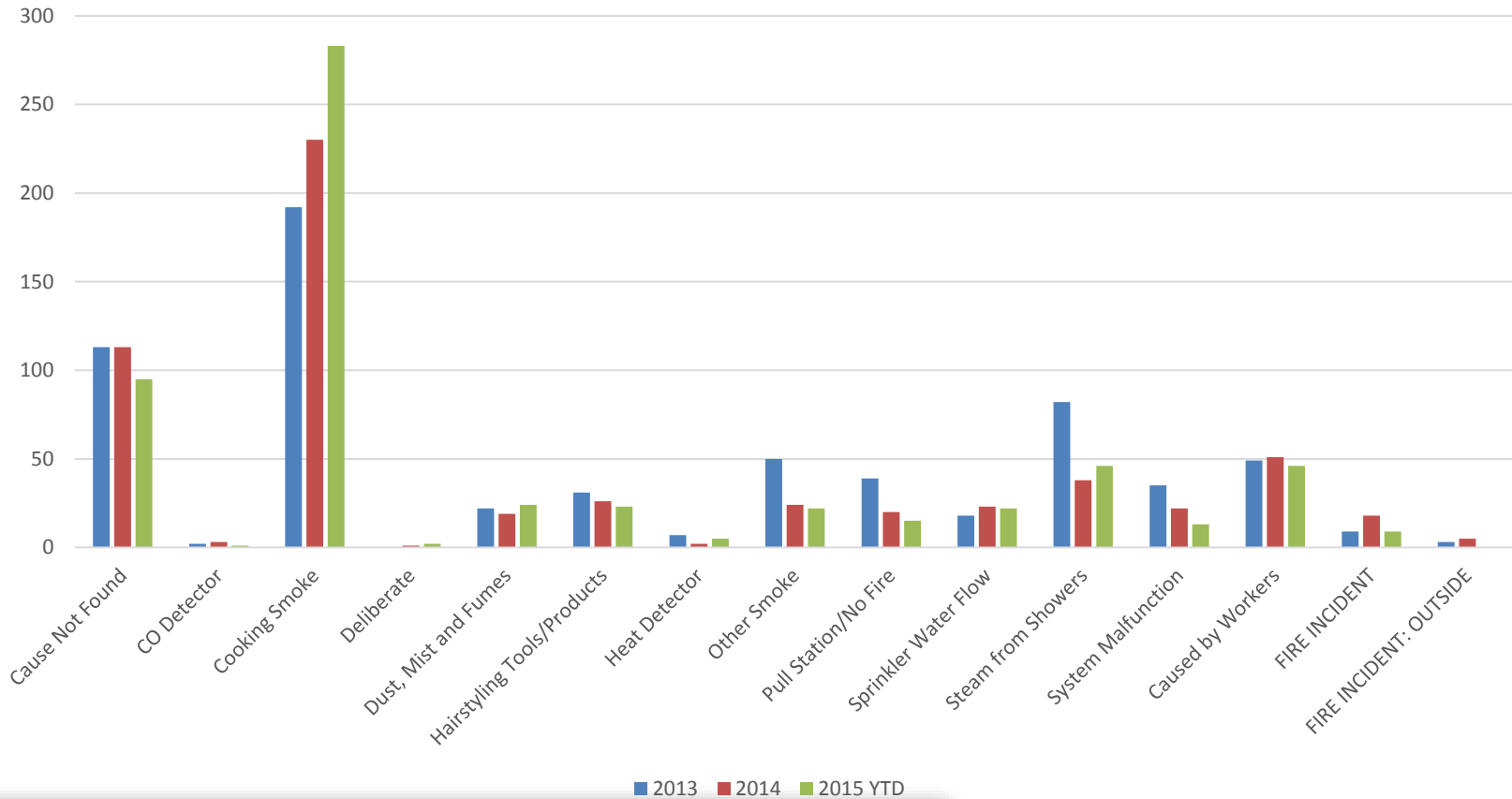
False Alarms Campuswide, 2014-15 vs 2015-16 YTD





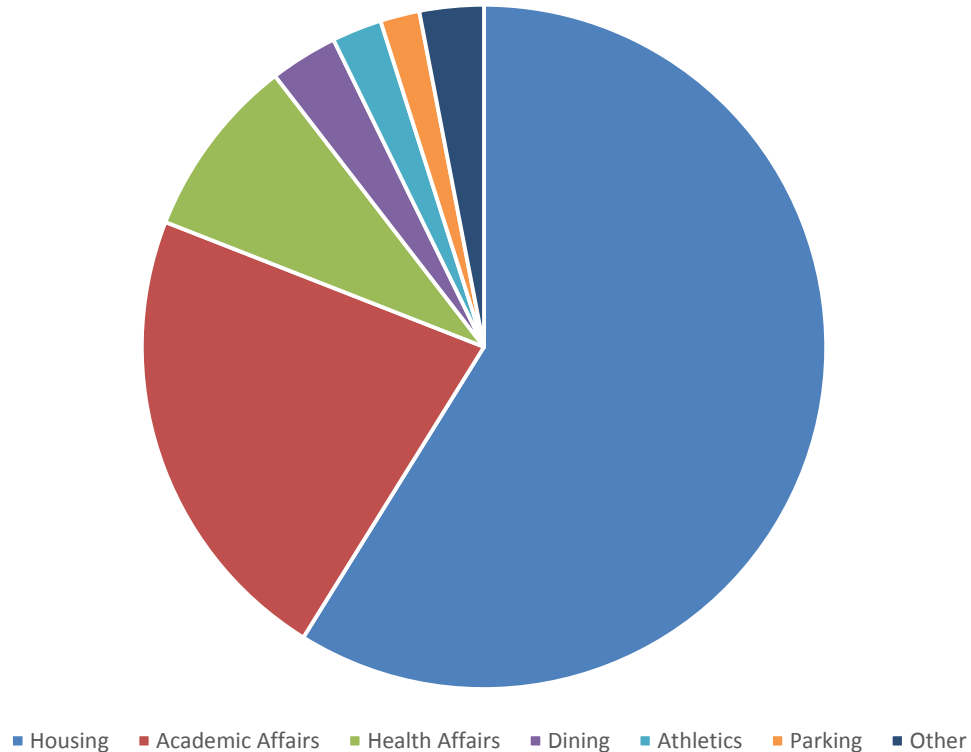
# Fire Incident Metrics

Fire Incidents: 2013 vs. 2014 vs. 2015 YTD



# Fire Incident Metrics

Fire Incidents By Building Type: 2014



# Questions?



# Attendees

Members Present: Gena Carter, Beverly Errede,  
Judy Faubert, David Kaufman, Derek  
Kemp, Mary Beth Koza, Christopher  
Payne, Doug Cyr, Jeff McCracken, Craig  
Fletcher, Paul Pogge, Michael Rolleri,  
Cindy Taylor

Members Absent: Lorraine Alexander, Anna Wu

Guests: Cathy Brennan, Mary Crabtree, David  
Guynn, Jonathan Moore



# Meeting Notes

Security Initiatives Update - Jeff McCracken and Derek Kemp

Cameras - The campus is in the process of selecting a firm to design and implementing cameras across campus.

Comprehensive Security Assessment - There is an updated comprehensive security assessment being done across campus. The last one was completed in 2002.

Lighting Tour – There was a UNC/Town of Chapel Hill lighting tour completed on the evening of November 18<sup>th</sup>. The purpose of the tour was to identify areas where increase lighting could reduce the potential of crime.

