FIRE AND LIFE SAFETY

Kansas State University
Environmental Health and Safety
The following training program is courtesy of the Kansas State Fire Marshal Office
FUNDAMENTALS OF FIRE AND LIFE SAFETY IN KANSAS

University Fire Marshal
The goal of this training

To enlist ALL

- Building managers
- Faculty
- Staff, and
- Building occupants

To become shareholders in fire and life safety
Kansas Fire Prevention Code is called Safety NET
Kansas fire Prevention Code includes:

- Code violations
- Exiting impediments
- Dangerous conditions
KANSAS FIRE PREVENTION CODE INSTRUCTS...

- Policy and office practice
- Nationally promulgated codes
- Administrative Regs
- Statutes
CODE REQUIREMENTS

- Use or occupancy determines building’s fire and life safety requirements

- When a building’s use changes, it is considered **NEW**

- The exiting, fire alarm and automatic sprinkler requirements must meet those of a **new building**
Violation: Improper storage of compressed gas cylinders.

Compressed gas cylinders must be chained or belted to prevent falling.
The glass’ size is 100 sq. inches maximum
The Kansas Fire Marshal *recommends* that all NEW school buildings in Kansas be provided with an automatic sprinkler system.
Kansas Fire Prevention Code prioritizes

People first

and then Property
KANSAS FIRE PREVENTION

Requires:
 Free access to exits
 Operational fire alarms
 Activation of sprinkler systems will sound alarm.
WHAT IS THE PROBLEM?

- Unfortunately, building occupants do not respond immediately to emergency conditions
SPEED IS WHAT YOU NEED

- Alarms are meant to alert occupants in the event of a fire.
- Safety is best assured with speedy exiting.
GRANDFATHER CLAUSE

If the Kansas Fire Marshal identifies conditions which impede speedy exit or are dangerous, the building owner must comply.

In Kansas there is NO “grandfather clause” for exiting.
ENDSS - EXITING
- NOTIFICATION
- DETECTION
- SEPARATION
- SUPPRESSION
MINIMUM REQUIREMENTS FOR EXITING

- Clear hallways and stairways (no furniture, equipment or storage)
- Clear access inside and outside
- Less than 30% of the hallways or stairway walls may be covered by displays or decorations
- Doors may not be covered with combustibles
- Emergency lights in all exit paths
Emergency lights
Violations:
Exit/egress obstructions
Improper storage in hallways
Violation:

Exit/egress obstruction

Improper storage in hallways
Proper construction site for EGRESS - open pathway with no trip hazards.

Violation:
Construction blocking egress
Violation:

Excessive decorations from ceiling
Violation: excessive fire-load

Violation: Improper combustible/flammable usage
MINIMUM REQUIREMENTS FOR EXITING

- Exit doors not blocked
- Door closures
- Panic hardware
- Exit signs visible & illuminated
- No improper locks, such as chains and padlocks or drop-in devices
Fire-door magnetic hold-open device
15-second time delayed panic hardware on door

Magnetic locking devices.

Will automatically de-energize in case of fire
Violation:
covering EXIT sign

Violation:
Door-closer with a fire-link
Violation:
Padlock on exit door
Violation:

Propped open fire-door
Violation:

Emergency exit blocked
NOTIFICATION

In case of fire

* Activate the fire alarm & evacuate the building

* Call University Police to report the fire (911 or 2-6400)
NOTIFICATION

Pull stations are located at:
1. All Required exterior exits
2. At intervals of no more than 200 feet
3. At exits from all floor levels
4. In rooms with exterior exits used by building occupants.
Fire alarm panels
Smoke and/or Heat Detection is required for special areas:

- Childcare
- Residence Halls
- Buildings with Exiting Problems (open stairs, below grade occupancy, dead-end hallways, construction exiting)
- Special Hazard Areas (labs, flammable storage areas)
Smoke (beam) detector

Fire and smoke detector
SEPARATION

- Proper fire separation doors
- Fire Doors kept closed **at all times!**
- Properly protected or sealed transoms
- No holes or missing tiles in ceiling
- No holes, grills, or openings in walls or floors
- Proper construction (sheetrock, masonry, or concrete)
Violation:

Improper storage in boiler/furnace room.

DO NOT store materials in these areas.
Violation:
Location of window, improper separation of lab to egress path
SUPPRESSION

* Automatic Sprinkler System – wet, dry or both
* Standpipe Systems - wet, dry or both
* Fixed Extinguishing Systems
  - Kitchen cooking equipment and hoods
  - Flammable finish and fume hoods
Standpipe system, hose connection for Fire Department use

Standpipe system, exterior fire department connections
Sprinkler head

Hood suppression system, kitchen grease hood
The National Fire Protection Association (NFPA) has existed since 1896. NFPA has no record of a fire killing more than two people in a completely sprinkled public assembly, educational, institutional, or residential building, where the system was properly operating.
Compensatory measures are either qualitative or performance based.
The Kansas Fire Marshal may recommend compensatory measures to correct existing conditions which impede speedy exiting.
Public Safety

All K-State safety systems (fire alarms, smoke detectors, heat detectors, and automatic sprinkler systems) are tested and maintained by Public Safety.
PUBLIC SAFETY

We ensure that:
- Alarms are audible throughout the building
- There is a sufficient number of safety devices
- Safety devices are in the required locations
- Written documentation is kept as required
KANSAS STATUTE 31-144

The Kansas Fire Marshal performs annual inspections and requires correction of dangerous conditions and impeded exiting.
The... Kansas Fire Marshal inspections take 15 minutes to 2 hours per building

Therefore -
Building occupants are essential to maintain fire safety
WHAT DOES IT MEAN?

All of us at K-State are responsible for fire and life safety on a daily basis, NOT the AHJ.

The AHJ (for K-state it is the Kansas Fire Marshal) ensures the checking, testing, and maintaining of the fire safety devices.
TRYING TO ELIMINATE VIOLATIONS

- Ignoring simple LIFE safety violations will compromise the value of your life
WHAT IS THE KEY

Education

And

Cooperation