N E B R A S K A

# JAIL BULLETIN

**SEPTEMBER 1993** **NUMBER 101**

The Jail Bulletin is a monthly feature of the Crime Commission Update. The Bulletin may be used as a supplement to your jail in-service training program if officers study the material and complete the attached "open book" quiz. The Bulletin and quiz may be reproduced for use by your staff. We welcome any jail training material you would like to contribute to the Bulletin.

## JAIL FIRE SAFETY

In every jail there exists the potential for a serious fire. The following examples illustrate just how dangerous jail fires can be.

Sanford, Florida, June 1975

A juvenile set fire to polyurethane mattresses stored outside his cell. One of two jail officers on duty attempted to get a standpipe hose to fight the fire, while the other officer went to report the fire and get additional help releasing the inmates. By the time he returned with help, the smoke and heat were so intense that the men were driven back after releasing only three inmates and inadvertently leaving cell keys in one lock.

Arriving fire fighters equipped themselves with self-contained breathing apparatus, searched for the lost keys and evacuated the remaining inmates. They found the first officer's body with the second set of keys. In addition to the one officer, ten inmates died from smoke inhalation.

Biloxi, Mississippi, November 1982

A mentally ill inmate set fire to the polyurethane foam padding in his cell with a cigarette. When the jail's fire alarm sounded, an officer went to investigate. Upon opening the cell door, toxic fumes and thick clouds of black smoke spread throughout the jail. Firefighters arrived in less than five minutes, but were unable to get into the cells. One set of keys were lost in the confusion and cells had to be opened with cables from tow trucks. Twenty-nine inmates were killed, forty-one inmates and officers suffered serious injury.

In both examples, polyurethane was used as fuel for the fires. Polyurethane foam is an extremely dangerous material to use for padding, mattresses or pillows in jails. A burning mattress made of this material creates five times as much heat as one made of boric acid treated cotton and produces significant amounts of very toxic gases. Most deaths in jail fires are caused by smoke or toxic gas inhalation, not burns.

Removing polyurethane or other petroleum based products from jails is just one step you can take to reduce fire danger. A comprehensive fire safety plan includes the following components.

## SIMPLIFIED FIRE SAFETY SYSTEM FOR JAILS

### I. IGNITION CONTROL

Most jail fires are deliberately set by inmates in their cells. Inmates start fires for a number of reasons. Irate inmates may use fire as a method to draw attention to their grievances. Mentally ill or intoxicated inmates may start fires on purpose or unintentionally. Fire may also be used by inmates planning to escape in the confusion of the evacuation.

Ignition control is the most difficult aspect of a fire safety plan. Inmates have access to matches for smoking and electrical outlets that provide a source for ignition may be available. Consider the following methods to control ignition sources in jails.

1. Control matches and smoking materials and provide increased supervision for mentally ill, intoxicated or problem inmates. Of course, this is especially important for those inmates with a history of fire starting.

2. Control access to electrical outlets. This is not a problem in some jails, but if it is you may be able to turn off outlets not inuse by using the jails circuit breakers. Another method of controlling this problem is the installation of ground fault circuit interrupters (GFCI). The GFCI turns off the power to a circuit if it is grounded, thus helping prevent fires or electrocution.

3. An effective grievance procedure will provide inmates an alternate method to deal with their frustrations without starting fires.

### II. FUEL CONTROL

Although most jails are constructed of non-flammable steel and concrete, there are usually many things in cells that will burn. Items made with plastic are especially dangerous because they burn rapidly and produce high amounts of heat and toxic smoke. Some inmates are real "packrats" and store large amounts of books, magazines, clothes, mail,

etc. in their cells. As a jail officer, you can control fuel sources in the following ways.

1. Don't use polyurethane mattresses or padding in your jail! As mentioned previously, this material can be extremely dangerous in a fire. Mattresses made of boric acid treated cotton with a fire resistive cover are currently the best option. These cotton mattresses are not fire proof. They will burn if ripped apart and placed on top of a fire, but they burn at a slower rate and produce less toxic fumes than other available mattresses.

2. Control the amount of property in inmate's cells. Most jails have rules covering the amount of personal property or reading material an inmate may keep in his/her cell. This is an easy thing to overlook but an important regulation to enforce.

3. Strictly control inmate access to flammable cleaning agents, aftershave, deodorant, perfume, lighter fluid, etc. Some stick deodorants can be melted down and burned due to their high alcohol content.

## III. OCCUPANT PROTECTION

Occupant protection is the concept of providing life safety in the event of a fire either by evacuation to a secure area or by defending the inmates in place. In addition to life safety, maintaining custody of inmates is also an objective. Defending in place may be appropriate depending on the size and source of the fire, manpower available, and fire fighting equipment immediately available. The jail officer may have to make an immediate decision upon discovering a fire. Evacuating the inmates to a safe and secure area is the best procedure unless the fire is very small and can be extinguished rapidly.

## IV. DETECTION AND SUPPRESSION

Detection and suppression activities include automatically or manually detecting a fire, sounding an alarm, and then extinguishing the fire. Many jails have automatic smoke and/or heat detectors but few have automatic sprinkler systems.

An automatic sprinkler system is clearly the superior option for extinguishing fires. Since most jails do not have them, officers must rely on portable fire extinguishers and/or standpipes (fire hoses) until the fire department arrives. Portable extinguishers are labeled with a rating system for difference types of fires. A staff member should be designated to inspect extinguishers on a regular basis to insure they are charged and maintained in working condition. Officers should be familiar with location and proper use of extinguisher and standpipes in their jails.

Several jails in Nebraska have self-contained breathing apparatus for officer's use when evacuating inmates or fighting fires. These units can be extremely useful by making it possible to enter areas that are filled with smoke and toxic gases. They should be used only by officers who have received adequate training in the proper operation of the units.

## V. PLANNING AND TRAINING

The last goal of the simplified fire safety system is no less important than the others. An effective fire plan and training can save staff and inmate lives in a jail fire. Nebraska Jail Standards require all jails to have a written policy on responding to jail fires that is approved by the State Fire Marshal's Office. The Standards also require that all staff be trained in the execution of emergency policies.

An emergency fire plan (policy and procedure) should have the following characteristics.

- o Simple - Although all roles, responsibilities, and contingencies should be clearly defined in a plan, too much detail can hinder flexibility.

- o Comprehensive - An emergency operating plan should include provisions for all circumstances that can be reasonably anticipated. The plan should define the roles of all personnel and equipment involved both within the outside the facility.

- o Specific - A plan should be uniquely tailored to the needs, resources, and capabilities of the individual facility. Also, a plan should address the difference amounts of personnel and equipment that are demanded by the various stages of response.

- o Flexible - A plan should be flexible enough so that procedures can be adapted to any unusual circumstances as well as probably emergencies.

- o Workable - A plan should relate to everyday operations of the facility. To maintain this workability, a plan should be updated or revised periodically.

Training for a fire emergency can be provided with the assistance of the local fire department. Training should cover the jail's fire emergency plan, use of firefighting equipment, and an actual or mock evacuation of the jail. The local fire department staff should be familiar with the jail and its locks in case they have to enter the facility to rescue staff or inmates.

**NOTE:** The Crime Commission Film Library has the following excellent audio/visual resources: Fire in the Jail, MTI Corp. 1984, VHS and 16 MM; and Fire Safety, VHS, 1990, American Jail Association

This issue of the Jail Bulletin was prepared by Kent Griffith, Senior Field Representative, Jail Standards Division, Nebraska Crime Commission. The material was adapted from Fire Safety in Correctional Institutions, a training manual developed by the National Fire Protection Association.

# QUIZ

Nebraska Jail Standards require that jail staff receive eighteen (18) hours of inservice training each year. The Jail Bulletin may be used to supplement inservice training if an officer studies the bulletin, completes the quiz, and this process is documented by the jail administrator for review during annual jail inspections.

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**SUBJECT**: Jail Fire Safety **NAME** _____

**DATE** _____

1. With regard to fire safety, what mattress padding material is the best choice to use in jails. _____

2. Most deaths in jail fires are cause by _____

_____

3. List the five components of the simplified fire safety system for jails.

   a. _____

   b. _____

   c. _____

   d. _____

   e. _____

4. What are two methods given to control fuel sources in jails?

_____

_____

5. Briefly outline your responsibilities required by jour jail's policy and procedures if you discover a fire in your jail.

_____

_____

CREDIT: 1/2 hour credit for jail in-service training requirement

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1. With regard to fire safety, what mattress padding material is the best choice to use in jails. BORIC ACID TREATED COTTON

2. Most deaths in jail fires are cause by SMOKE OR TOXIC GAS INHALATION

3. List the five components of the simplified fire safety system for jails.

   a. IGNITION CONTROL

   b. FUEL CONTROL

   c. OCCUPANT PROTECTION

   d. DETECTION AND SUPPRESSION

   e. PLANNING AND TRAINING

4. What are two methods given to control fuel sources in jails?

   REMOVE POLYURETHANE/PLASTICS, CONTROL AMOUNT OF PROPERTY IN CELL, CONTROL INMATE ADDRESS TO FLAMMABLE CLEANING AGENTS, DEODORANTS, ETC.

5. Briefly outline your responsibilities required by jour jail's policy and procedures if you discover a fire in your jail.

   ANSWER SHOULD ACCURATELY REFLECT THE REQUIREMENTS OF YOUR JAIL'S EMERGENCY FIRE POLICY AND PROCEDURE

CREDIT: 1/2 hour credit for jail in-service training requirement

ANSWER SHEET SHOULD BE RETAINED BY JAIL ADMINISTRATOR OR TRAINING OFFICER