## **HOSPITALS DON'T BURN DOWN**

## **Department of Veterans' Affairs**

## **Notes for Trainers Using the Film**

Hospitals don't burn down! is a 24-minute film which vividly portrays a credible series of events leading to a major fire in a large general hospital.

The film, a dramatised documentary, conveys a grim warning as to what can happen in a hospital through an irresponsible act, poor housekeeping, breakdowns in discipline amongst staff and patients and, above all, through a lack of proper fire-safety training for all categories of staff.

The tragedy begins at approximately 10:35 p.m., when a patient (called Hilton) disposes of a lighted cigarette down a laundry chute on the 8<sup>th</sup> floor of the hospital. The burning cigarette falls on to newspaper lying beneath a growing pile of soiled linen bundles in the basement. The newspaper slowly ignites and the small flames reach into the linen bundles. Spirit-impregnated materials carry the fire into flammables carelessly stored in the basement. At 1:45 a.m., the fire detectors in the basement are activated and the alarm goes to the local fire brigade. At 1:46 a.m., a student nurse, ignoring warning smoke, opens the laundry chute on the 8<sup>th</sup> floor and dies horribly in a maelstrom of fire. She is the first of nine people to die from burning or smoke inhalation. The flames rampage through the basement, 8<sup>th</sup> and 9<sup>th</sup> floors, and stairways of the hospital for six hours.

The film shows the terrible speed with which flame and smoke travel; the problems of alerting all staff to the menace unleashed; the difficulties met in evacuating seriously ill and incapacitated patients without accident and the onset of panic; the additional dangers of the fire which occurs at night when staffing is minimal, patients are asleep, and visibility on artificial lighting.

The film contains some very moving scenes: a cleaner dies, incinerated in a jammed lift, only seconds before the lifts are grounded by the fire brigade; a group of young children are endangered by the flames; three people are seen to die of smoke inhalation; John, the main character, dies as he attempts to rescue a child.

The following discussion points (which by no means constitute an exhaustive list) can be extracted from the film:

 Patient (Hilton) smoking under the bedcovers after lights-out. The sister (Freeman), doing her rounds, catches him. She orders him to extinguish the cigarette. She does not issue a fire warning.

Are the measures taken in your hospital to prevent illicit smoking, especially at night and in bed, adequate? If not, why not? What further steps could, or should, be taken in this important area of patient discipline?

The fire occurs at night when staffing numbers are heavily reduced.

The hospital is more vulnerable at night. Most patients are asleep. The difficulties of speedy evacuation are heightened. How would you fare if the lights failed?

• The children bedding down – the children were involved in a vehicle accident on an outing and were taken to the hospital for overnight observation.

Note the dressing gowns and the toys. Are the items non-flammable?

- The I.C.U. scenes included to bring out the problems which would be met in evacuating seriously ill persons and patients who are being kept alive on support systems.
- Nurses station sister chatting to student nurses. The hospital's emergency phone number does not appear on the front of the telephone.

Are all the phones in your hospital marked with the emergency number? Do all staff members know the emergency number and the procedure to be followed in reporting a fire? Are hospital switch-board staff aware of all emergency actions required of them?

• The basement scene – hospital housekeeping at its worst, with flammable materials including cartons of shredded paper carelessly stored.

The hospital is literally an arsenal with high risk points in store rooms, oxygen reservoirs and pipes, kitchens, cafeterias, visitors' lounges, and operating theatres.

The term "flammable" is preferable to "inflammable" and efforts are being made to have the term "flammable" generally adopted. Are all staff aware of the confusion which the term "inflammable" can cause, especially to people not familiar with the English language? Are flammability warnings, fire-safety signs, brochures, notices, basic fire orders etc., printed in languages other than English? Bearing in mind the multi-national composition of our hospital work force and our patients, are we communicating effectively with all staff and patients in the vital area of fire safety?

At 30 June 1977, 30% of our hospital work force were defined as migrants ie. persons born overseas. At the same date, migrants made up 14% of our total inpatients in New South Wales and Queensland; about 12% in Victoria and South Australia; 6% in Tasmania; and 26% in Western Australia.

• To avoid again being caught smoking, Hilton throws the lighted cigarette down the laundry chute. (Time: 10:35 p.m.)

The chute was not properly closed and was not labelled "Linen Disposal". Even were the chute clearly labelled as a waste disposal unit, Hilton's action in throwing a lighted cigarette down it is completely irresponsible. Are the various chutes in areas normally accessible to our patients and visitors always properly secured? Are they labelled? Should they be labelled? Are patients briefed on the hazards of smoking in a hospital?

· Cigarette smoulders and ignites newspaper; flames reach linen bundles.

Some scepticism may arise that the smouldering cigarette could have ignited the newspaper and subsequently the bundles of linen. Tests were done during filming to prove that this sequence of events was credible. In fact, the fire chain displayed was the cause of a fire in an Australian hospital in recent years. Is the presence of spirit-impregnated material in soiled linen bundles fully appreciated as a serious hazard? What steps should be taken to ensure better fire safety procedures and conditions in this regard? Is smoking outlawed near such bundles?

- The basement fire detectors are activated at 1:45 a.m. Note the movement of the flag on the fireboard, the appearance of the red light on the hospital map, and the alarm to the local fire station. Note most importantly that the fire has been building up undetected for over 3 hours! Could this situation happen in this hospital? At night? Are our fire patrols adequate? What fire detectors are installed in your hospital?
- Student nurse approaches laundry chute with a bundle of soiled linen. She notices the emerging wisps of smoke .....pauses......then makes the wrong, and for her, fatal decision to open the chute. The inferno in the basement leaps up the chimney thus opened to the 8<sup>th</sup> floor, igniting whatever flammables it touches. Sister Freeman runs into a ward to get a blanket to smother the flames enveloping the student nurse. She cannot, however, get past the belching chute nor close the door. What actions should the student nurse have taken on seeing the smoke curling from the improperly closed laundry chute? What actions must you take if you find evidence of a fire?

Note the absence of nearby fire extinguishers. Had there been an extinguisher to hand, could Sister Freeman have saved the student nurse?

Reactions of patients and staff.

Here we see the seeds of panic. Effective patient control and staff discipline must prevail at this point. The hysterical young woman runs into a bathroom and vomits. As later events show, she becomes lost at \this point and is not found by ward staff who (in teams of at least two persons) should have searched the toilet areas as the floor was evacuated.

• The cleaner is incinerated in a jammed lift in the basement.

This scene brings out very clearly the fact that there is little likelihood of escape from a lift which opens on to a major fire. In fire emergencies, lifts must never be used for evacuation purposes. Are all staff aware that lifts can be death traps? Do the lifts in your hospital automatically come to ground level when the fire alarm is activated or do they have to be grounded manually? The Meteorological Bureau in Melbourne has signs inside its lifts saying that if a fire alarm is raised, the lift must be evacuated immediately – in effect, this may mean the next floor. Should we put similar signs in our lift?

- Fire Chief has lifts manually grounded at 1:55 a.m. Had this action occurred a minute earlier, the cleaner would have lived. The fire is now raging in the basement, main stairway and on the 8<sup>th</sup> floor, thus splitting up fire-fighting, rescue and evacuation efforts.
- · Ward evacuation scenes.

Note the use of the able-bodied patient (ironically Hilton) to help in the evacuation of other less mobile patients.

The cutting down of a patient in traction is pretty drastic, but presumably necessary under the circumstances. John's remarks are brusque. The bed-end sticks, however, thus impeding sliding of the patient on to a stretcher (not shown).

Note the types and quality of the patient transfers being used by staff. A female patient is lifted from her bed into a wheelchair. As this action is taking place on the 8<sup>th</sup> floor and evacuation has to proceed via the stairs, is this transfer logical?

Should the drip have been removed from the female patient? What control actions should follow its removal? Should a label of some kind have been affixed to the patient?

Note the blanket drag used to evacuate an unconscious patient.

Note particularly that student nurse chocks opening fire door. This is a fateful action.

Fire Chief orders oxygen to be cut off.

Why? Recall the Fire Triangle: Fuel, Heat and Oxygen. Note very serious implications for I.C.U. Stress that life-saving oxygen stored in cylinders and flowing in pipes to various locations can be a terrible danger in a fast moving fire.

- Sister Freeman takes names of patients filing past her. Is her action a basic drill for ward sisters in a fire emergency?
- Fire reaches painting equipment stored at end of ward near fire door.

A glaring example of unsafe housekeeping as evidenced by paint/solvent explosion, incineration of student nurse seeking to close chocked fire door, and spread of fire into fire escape stairway. Stairway is cut and patients and accompanying staff have to flee to the roof.

- Evacuation of patients on life support equipment in intensive care unit. This scene is
  intended to raise without unnecessary dialogue the critical issue as to who should be
  evacuated first. The claims of the young and healthy with longer life-expectancies must be
  weighed against the claims of the elderly and infirm and persons suffering from incurable
  complaints. Who should make the decision as to who goes and who stays?
- Fire Chief comments to the effect that in ten minutes the fire is getting out of control.

The need for prompt and accurate reporting of the location, nature and intensity of fires and the initiation of effective fire fighting measures should be stressed. What must staff do on finding evidence of a fire? Have all staff been properly trained in this regard?

John and Sister Freeman inform children of the fire.

Note calm approach and reference to "small fire" to avoid frightening the children. Note particularly that before John opens the door to the corridor he does not test it for heat.

The basic safety drill for a right-handed person opening a door in the situation depicted is to press right foot and knee against door, place right hand on handle, and press palm of left hand, against upper door surface. If palm can be held against the door, the door should be opened gradually to determine conditions on the other side of it.

Note terry-towelling dressing gown on one child.

• John uses CO2 extinguisher to try to clear a safe path. Extinguisher life seems short.

What type of extinguisher is suitable for the fires show? Are the extinguishers in your hospital of the right type? Are they filled to capacity? How can you check? When were checks last carried out?

Do all staff know how to use the various types of extinguishers i.e., bring them to bear in the shortest possible time and use them to best advantage?

Woman crawling down smoke-filled stairway.

How did this patient come to be on her own? Was there a breakdown in evacuation procedures, in staff discipline? One sometimes hears the view that smoke inhalation mercifully ends people's lives before they are burned to death. This is not so! Smoke kills most painfully!

Note that in this scene, as in the other smoke scenes, no patient or staff member has thought to obtain a face covering of any type (handkerchief, wet towel, strip torn from clothing etc.).

Roof Scene – patients forced upwards by fire cutting stairway.

Note the need for effective crowd control for keeping patients in a group, warm and quiet.

Doctor and patient choking. Student nurse succumbs to smoke. Two points are to be made most strongly: firstly, smoke kills and most painfully; secondly, staff should team up at least in pairs when undertaking searches.

The woman patient – hysterical, left behind.

This scene illustrates a breakdown in evacuation control.

Roof scene.

Patients and controlling staff on the roof can do nothing but wait, hope and pray. How long will discipline last?

Student nurses complain about their lack of fire safety training.

Could student nurses, or any other group of staff, in your hospital make identical complaints? Do all hospital staff participate in vigorous fire safety training programs? Could the staff of your hospital cope with an emergency of the type depicted in the film? What are the legal and moral responsibilities of hospital management and staff in regard to fire safety of patients?

John and Sister Freeman with children.

The irony of the short ladder.

John and Sister Freeman would undoubtedly stand a better chance of getting out of danger without the children. They decide, however, to try to get the children out.

Note especially the advice given by John to the children as they prepare to make a break for safety: "Keep together, get down on your hands and knees, no talking, breathe slowly through your nose."

Note how the children are boxed in with John in lead and Sister Freeman at rear. Were John wise, he would be testing floor temperatures with the palms of his hands.

· Explosion of oxygen cylinders.

All flammables especially those like gases under pressure must be safely stored. Large quantities must be kept at safe distances and in proper storages away from the hospital proper. What quantities of flammables and/or explosives are stored in your individual work areas? Are these quantities excessive?

Scenes in ward of burning bedding, drapes, blinds, cards, teddy bear.

Are non-flammable materials in use throughout your hospital? Linen? Blankets? Pyjamas? Gowns? Drapes? Furniture? Furnishings? In wards, homes, waiting areas? Are toys and other items brought by patients into your hospital checked for safety? What happens in the case of flammable toys or electrical equipment such as shavers and radios?

Shot of fire door.

Paint is badly bubbled but door is secure. This is not a trick shot but records what actually happened during filming when fire accidentally hit the door.

Exodus of patients and staff from roof.

Note the need for proper crowd control to avert a stampede or panic. When a person is wrapped in a blanket, the hands are impeded – this is a dangerous situation as was proved on the stairs during filming.

Scene of burning ward with abandoned wheelchair.

Recall the transfer of a female patient from her bed to a wheelchair. Was this action logical? Would it have been better for two lifters using a cradle lift to have carried the patient from the bed into the stairway thence to safety?

Sister Freeman, seeking John, meets lost, hysterical patient.

Note shock treatment, also that Sister Freeman is not carrying an extinguisher nor masked against smoke.

Final scenes outside the hospital.

Voice-over commentary – 2:16 a.m.: The fire has now been burning for 31 minutes; 100 firemen from 12 stations will fight the fire, which will burn for 6 hours, i.e. from 1:45 a.m., when alarm sounded, to about 8 a.m.; 9 people will die.

The death toll is as follows:

- 1. Student nurse incinerated opening laundry chute.
- 2. Cleaner incinerated in lift in basement.
- 3. Student nurse incinerated when paint tins explode.
- 4. Doctor and patient die from smoke inhalation.
- 5. Student nurse asphyxiated on solo search.
- 6. Person hurled by oxygen explosion from window.
- 7. Person hurled by oxygen explosion from window.
- 8. Unknown body found by firemen in basement.
- 9. John

It is imperative that all hospital staff should see this film and be given the opportunity to appraise and comment upon the relevance of the scenes depicted to their work situations and their hospital generally.

The film should be shown in a training framework of 1 1/4 hours minimum time to all hospital staff. The form of the session should be as follows:

Introduction: brief comments by training officer on the purpose and content of the session.

2-3 minutes

Uninterrupted screening of the film *Hospitals don't burn down!* **24 minutes** 

Break for message to sink in, individual reaction to surface, informal discussions.

15 minutes

Discussion led by medical superintendent or other senior hospital officer, of film's message and its relevance to the local scene.

25-30 minutes

Total time: 75 minutes approx.

Audiences should be kept as small as possible to enable a reasonable measure of discussion

The basic training which is to be provided to all newcomers is set out in the Stage 1 Program shown in the Fire Safe Trainers' Manual of October 1976. Copies of this manual were forwarded to all branches in early 1977. The film *Hospitals don't burn down!* is to be included as the final item in the Stage 1 Training Sequence.

Continuation training is detailed in the Stage 2 Program set out in the Trainers' Manual.

For information about Film Australia's programs, contact:

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