**Questionnaire: Fire/disaster preparedness and evacuation planning in intensive care units (Sweden)**

**General**

1. How many beds do you have in your ICU.
2. On which hospital floor is your intensive care unit?
3. Does your hospital have a fire evacuation plan?
4. Do you have a special fire evacuation plan for your intensive care unit? (if so, please send us a copy)
5. Are there obligatory fire evacuation exercises for permanent ICU personnel?
   1. If so, how often?
   2. If yes (to number 5) please answer the following- are these things present in your ICU fire plan?
      1. Is there a record kept for what has been done when a fire occurs?
      2. How one activates the fire alarm (in the fire evac plan)?
      3. Manual activation of the fire alarm?
      4. Things that should be done immediately when the alarm is heard?
      5. List of tasks for the fire response person?
      6. Instructions for operation of fire extinguishers?
6. Do you have obligatory fire response exercises for temporary ICU personnel?
   1. If so, how often?
   2. If yes to number 6, then please answer the following:
      1. Is there a record for what has been done when a fire occurs?
      2. How one activates the fire alarm (in the fire evacuation plan)?
      3. Manual activation of the fire alarm?
      4. Things that should be done immediately when the alarm is heard?
      5. List of tasks for the fire response person?
      6. Instructions for operation of fire extinguishers?
7. Are all new personnel shown all the emergency exits for your ICU on their first day of work?
8. Are all your personnel informed about their tasks in case of fire before or on their first day of work?

**Intensive care unit layout**

1. How many evacuation routes are there in the intensive care unit?
2. Are there specific fire-safe areas inside the intensive care unit?
3. Are there specifically identified ‘fire-doors’?
   1. If ‘yes’, please answer the following:
      1. So the ‘fire-doors’ have an automatic closing mechanism?
      2. Fire-proof windows in the doors?
      3. Do they have warm-activated molding around the door?
4. Is the air-conditioning register and damper in the ICU fitted with an automatic ‘shut-off’ system connected to the smoke-heat detectors?
5. Is the main control panel for the fire alarm located centrally in the hospital?
   1. Is there a fire alarm indicator in the ICU?
6. Is there a smoke detector in every room in the ICU?
7. Is the fire alarm:
   1. Audible?
   2. Visual?
8. If a fire occurs in another part of the hospital, will the fire alarm in the Intensive Care Unit be activated?
9. What type of fire extinguisher is available in the ICU?
   1. Carbon dioxide?
   2. Foam?
   3. Powder?

**Areas of Responsibility**

1. Is there a policy for prioritizing when there is a decision to evacuate?
   1. If ‘Yes’, which factors determine priority? (Is it degree of illness, prognosis, proximity to the fire?)
2. Who is responsible for making this decision about priority and evacuation?
3. If the fire spreads from another part of the hospital, who decides that the ICU must be evacuated?
4. Who has the overall update of the number of fires in the ICU?
5. Are there reflective vest or other similar readily available items for the fire ‘control’ leader in the ICU?
6. Do ICU personnel know where to find the following?
   1. Valves to close medical gas inflow?
   2. The electrical switch and fuse box for the ICU
   3. The location of highly flammable liquids and materials in the ICU?

**Response to fire in the ICU**

1. How much time (after the alarm) is expected before the Fire/rescue squad can reach the ICU
2. Is vertical evacuation a possibility for the ICU?
   1. In that case, to where would there be evacuation?
3. Is it part of the evacuation plan to close the oxygen supply valve to the ICU?
4. Are there specific agreements with nearby hospitals for possible further care of evacuated patients?
5. Are there special instructions for management of the following problems during evacuation:
   1. Sedation?
   2. Muscle relaxants?
   3. Inotropes and vasopressors?
   4. Enteral nutrition?
   5. Total parenteral nutrition?
   6. Thoracic drain?
   7. Continuous renal replacement therapies/hemofiltration and continuous dialysis
   8. Intra-aortic balloon pump?
   9. Extra-corporeal membrane oxygenation?
   10. Mechanical heart assist devices?
6. Is there a checklist for items that should follow each patient in case of evacuation?

**General equipment**

1. Do you have a prepared and ready ‘acute’ kit with, for example, drugs, fluids, and other items?

If ‘Yes’, how many?

1. Do all ICU infusion pumps have batteries?
   1. If ‘Yes’, are the batteries always fully charged?
   2. (How long are the battery charges expected to last?, own question)
2. Does your ICU have portable suction devices?
3. Does your ICU have portable monitoring device
   1. Pulse oximeter? If ‘Yes’, how many?
   2. Non-invasive blood pressure measurement devices? If ‘Yes’, how many?
   3. Fully equipped monitoring devices (ECG, invasive blood pressure monitoring, pule oximetry? If ‘Yes’, how many?
4. Does your ICU have portable defibrillators? If ‘Yes’, how many?
5. Does your ICU have transport ventilators? If ‘Yes’, how many?
6. Does your ICU have portable oxygen tubes with reduction valves and flow-meters for each bed?
7. How often are these portable oxygen tubes checked?
8. Does each ICU bed have a specific evacuation sheet or similar lifting and moving assistance items?
9. Is there an alternative for evacuation ‘beds’, such as ‘glide’ mattresses

**Practical experience**

1. Have you yourself been directly involved in the evacuation of an intensive care unit with live patients?
2. Have you ever participated in an evacuation drill in you intensive care unit?

If yes, was this conducted with live (simulated) patients, with patient facimiles (manikins) or with neither?

1. Where your local Fire and Rescue services direct participants in this exercise?