



## SURGICAL SAFETY CHECKLIST (DRAFT)

**SAFE SURGERY SAVES LIVES  
GLOBAL PATIENT SAFETY CHALLENGE  
WORLD HEALTH ORGANIZATION**

***SIGN IN - PRIOR TO INDUCTION OF ANAESTHESIA, THE FOLLOWING ITEMS MUST BE COMPLETED:***

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li><input type="checkbox"/> CONSENT OBTAINED</li> <li><input type="checkbox"/> SITE MARKED/NOT APPLICABLE</li> <li><input type="checkbox"/> PULSE OXIMETER ON PATIENT AND FUNCTIONING</li> </ul> | <ul style="list-style-type: none"> <li><input type="checkbox"/> PATIENT CONFIRMED IDENTITY, SITE AND PROCEDURE</li> <li><input type="checkbox"/> ANAESTHESIA SAFETY CHECK COMPLETED</li> </ul> |
|--|--|

**DOES PATIENT HAVE A:**

- |  |  |
|--|--|
| KNOWN ALLERGY                                    | <input type="checkbox"/> NO <input type="checkbox"/> YES                                     |
| DIFFICULT AIRWAY (E.G. MALLAMPATI 3 OR 4)        | <input type="checkbox"/> NO <input type="checkbox"/> YES, AND ASSISTANCE AVAILABLE           |
| RISK OF >1000CC BLOOD LOSS (15CC/KG IN CHILDREN) | <input type="checkbox"/> NO <input type="checkbox"/> YES, AND ADEQUATE IV ACCESS ESTABLISHED |

***TIME OUT - PRIOR TO SKIN INCISION, THE FOLLOWING ITEMS MUST BE COMPLETED:***

- SURGEON, NURSE, AND ANAESTHESIA PROFESSIONAL VERBALLY CONFIRM PATIENT, SITE, PROCEDURE, POSITION
- ANTIBIOTIC PROPHYLAXIS GIVEN IN LAST 60 MIN  NOT APPLICABLE
- ESSENTIAL IMAGING DISPLAYED  NOT APPLICABLE

**ANTICIPATED CRITICAL EVENTS**

- SURGEON REVIEWS: WHAT ARE THE CRITICAL OR UNEXPECTED STEPS, OPERATIVE DURATION, ANTICIPATED BLOOD LOSS?
- ANAESTHESIA TEAM REVIEWS: WHAT ARE CRITICAL RESUSCITATION PLANS, PATIENT-SPECIFIC CONCERNS, IF ANY?
- NURSING TEAM REVIEWS: WHAT ARE THE STERILITY INDICATOR RESULTS, EQUIPMENT ISSUES, OTHER PATIENT CONCERNS?

- OTHER CHECKS: \_\_\_\_\_

***SIGN OUT - PRIOR TO REMOVAL OF SURGICAL DRAPES, THE FOLLOWING ITEMS MUST BE COMPLETED:***

- SURGEON REVIEWS WITH ENTIRE TEAM:
  - WHAT PROCEDURE WAS DONE
  - IMPORTANT INTRA-OPERATIVE EVENTS
  - MANAGEMENT PLAN
- ANAESTHESIA PROFESSIONAL REVIEWS WITH ENTIRE TEAM:
  - IMPORTANT INTRA-OPERATIVE EVENTS
  - RECOVERY PLAN
- NURSE REVIEWS WITH ENTIRE TEAM:
  - INSTRUMENT AND SPONGE COUNTS
  - SPECIMEN LABELLING (INCLUDING PATIENT NAME)
  - IMPORTANT INTRA-OPERATIVE EVENTS/RECOVERY PLAN

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
DATE

INSTRUCTIONAL MANUAL  
FOR THE USE OF THE  
WORLD HEALTH ORGANIZATION  
SURGICAL SAFETY CHECKLIST

*DRAFT*

## INTRODUCTION:

The *Safe Surgery Saves Lives* program has been established by the World Alliance for Patient Safety as part of the World Health Organization's efforts to reduce surgical deaths across the globe. The Challenge seeks to harness political commitment and clinical will to address many important safety issues, including inadequate anaesthetic safety practices, avoidable surgical infection, and poor team communications. These have proved to be common, deadly, and avoidable problems across all countries and settings.

To assist operative teams in reducing these occurrences, the Alliance, in consultation with surgeons, anaesthesiologists, nurses, other clinicians, and patients from around the world, has identified a set of safety checks that could be performed in any operating room. The resulting draft Surgical Safety Checklist (available at [www.who.int/patientsafety/challenge/safe.surgery/en/index.html](http://www.who.int/patientsafety/challenge/safe.surgery/en/index.html)) aims to reinforce accepted safety practices and foster better communication and teamwork among clinical disciplines. The checklist is not a regulatory device or a component of official policy. It is intended as a tool for use by clinicians interested in improving the safety of their operations and reducing unnecessary surgical deaths and complications.

## HOW TO USE THIS MANUAL:

In this instructional manual, the “operative team” is understood to include the surgeons, anaesthesia professionals, nurses, technicians, and other operating room personnel assisting with the surgery. Much as an airplane pilot must rely on the ground crew, flight personnel, and air traffic controller for a safe and successful flight, a surgeon is an essential but not solitary member of a team responsible for patient care. The operative team referred to in this manual is therefore composed of all persons involved with the surgery, each of whom plays a role in ensuring the safety and success of an operation.

This manual provides suggestions for implementing the checklist, understanding that different practice settings will adapt it to their own circumstance. Each individual safety check has been included based on clinical evidence or expert opinion that its inclusion will reduce the likelihood of serious, avoidable surgical harm and that adherence to it is unlikely to introduce injury or significant cost. The checklist was also designed for simplicity and brevity. Many of these steps are already accepted as routine parts of practice in facilities around the world, though they have only rarely been followed in their entirety. As a result, each surgical department must practice with the checklist and examine how to sensibly integrate these essential safety steps into their normal operative workflow.

Ultimately the goal of the surgical safety checklist—and of this instructional manual—is to help insure that teams consistently follow a few critical safety steps and thereby minimize the most common and avoidable risks that endanger the lives and well-being of surgical patients.

#### **HOW TO RUN THE CHECKLIST (IN BRIEF):**

In order to implement the checklist during surgery, a single individual must be made responsible for checking the boxes on the list. This designated checklist coordinator will usually be a circulating nurse, but it can be any clinician participating in the operation.

The checklist divides the operation into three phases, each corresponding to a specific time period in the normal flow of a procedure—the period prior to induction of anaesthesia (the Sign In), the period after induction and before surgical incision (the Time Out), and the period during or immediately after wound closure (the Sign Out). In each phase, the checklist coordinator must be permitted to confirm that the team has completed its checks before it proceeds onward with the operation. As operative teams become familiar with the steps of the checklist, they can integrate the checks into their familiar work patterns and verbalize their completion of each step without the explicit intervention of the checklist coordinator. Each team should seek to incorporate the checklist with maximum efficiency and minimum disruption, while aiming to accomplish the steps effectively.

The review of nearly all checklist steps will be done verbally, confirming with the appropriate personnel that the key actions have been taken. Therefore, for the Sign In before induction of anaesthesia, the individual coordinating the checklist will verbally review with the patient (when possible) that his or her identity has been confirmed along with the site and procedure, and that consent to operate has been obtained. The coordinator will visually confirm that the operative site has been marked (if appropriate), and will verbally review with the anaesthesia professional the patient's risk of blood loss, airway difficulty, and allergies as well as whether a full anaesthesia safety check has been completed. Ideally the surgeon will be

present for the Sign In, as the surgeon may have a clearer idea of anticipated blood loss, allergies, or other complicating patient factors.

For the Time Out, the team will pause immediately prior to the skin incision to confirm out loud that prophylactic antibiotics have been administered within the last 60 minutes and essential imaging displayed, as appropriate. The operating surgeon, anaesthesia professional, and circulating nurse will then verbally review with one another, in turn, the critical elements of their plans for the operation, using the checklist's questions for guidance.

Finally, for the Sign Out, the surgeon, anaesthesia professional, and circulating nurse will each review out loud, and in turn, the critical operative events and plans for safe postoperative management before ending the operation and removing the sterile drapes. The surgeon will also confirm what procedures were done, the anaesthesia professional the recovery plan, and the nurse the specimen labelling and completion of sponge and instrument counts.

Having a single person lead the checklist process is essential for its success. In the complex setting of an operating room, any of the steps may be overlooked during fast-paced preoperative, intraoperative, or postoperative preparations. By designating a single person to confirm completion of each step of the checklist, the steps will not get omitted in the rush to move forward with the next phase of the operation. Until team members are familiar with the steps involved, the checklist coordinator will likely have to guide the team through this checklist process.

The disadvantage of having a single person lead the checklist is that it may set up an antagonistic relationship between this person and other operative team members. The checklist coordinator can and should prevent the team from progressing to the next phase of the operation until each step is satisfactorily addressed, but in doing so may alienate or irritate other team members. Therefore, the hospital must carefully consider which staff member is in the best position to play this role. As mentioned, for most institutions this will be a circulating nurse, but any clinician can coordinate the checklist process.

## **HOW TO RUN THE CHECKLIST (THE DETAILS):**

### ***SIGN IN:***

The **Sign In** is to be completed prior to induction of anaesthesia in order to confirm the safety of proceeding. It requires the presence of the anaesthesia professional and nursing personnel at the very least. The checklist coordinator may complete this section all at once or sequentially, depending on the flow of preparation for anaesthesia. The details for each of the boxes in the Sign In are as follows:

#### **CONSENT OBTAINED**

This checkbox is completed once the coordinator confirms that the patient (or the patient's representative) has given consent for surgery and anaesthesia. The consent process remains defined by the local hospital's procedures, but is understood to involve a discussion with the patient (or representative) of the procedure to be undertaken and its expected risks and benefits. A documented consent may have been completed in advance, but nonetheless should be confirmed on the day of surgery prior to induction of anaesthesia. If consent is waived, such as in an emergency, the checklist coordinator should check the box only if the waiver has been formally established following local hospital procedures.

#### **PATIENT CONFIRMED IDENTITY, SITE AND PROCEDURE**

Here the coordinator will verbally confirm with the patient his or her identity, the type of procedure planned, and the site of surgery. While it may seem repetitive, this step is an essential part of the process of insuring that the team does not operate on the wrong patient or site or perform the wrong procedure. When confirmation by the patient is impossible, such as in children or incapacitated patients, a guardian or family member can function in this role. If a guardian or family member is not available and this step is skipped, such as in an emergency, the box should be left unchecked.

#### **SITE MARKED/NOT APPLICABLE**

The checklist coordinator should confirm that the surgeon performing the operation has marked the site of surgery (usually with a permanent felt-tip marker) in cases involving laterality (a left or right distinction), or multiple structures or levels (e.g. a particular finger, toe, skin lesion, vertebra). Site-marking for midline structures (e.g. thyroid) or single

structures (e.g. spleen) will follow local practice. Some hospitals do not require it because of the extreme rarity of wrong-site surgery in these instances (although it does provide another backup check confirming the correct site and procedure).

#### **ANAESTHESIA SAFETY CHECK COMPLETED**

The coordinator will complete this next step by asking the anaesthesia professional to verify completion of an anaesthesia safety check, understood to be a formal inspection of the anaesthetic equipment, instruments, and medications prior to each case. A helpful mnemonic is that the anaesthesia team should complete the ABCDEs – an examination of the Airway equipment; Breathing system (including oxygen and inhalational agents); suCtion; Drugs and Devices; and Emergency medications, equipment, and assistance to confirm their availability and functioning. (There are separate anaesthesia checklists endorsed by professional societies currently in use to meet this purpose.)

#### **PULSE OXIMETER ON PATIENT AND FUNCTIONING**

The checklist coordinator will confirm that a pulse oximeter has been placed on the patient and is functioning correctly prior to induction of anaesthesia. Ideally the pulse oximetry reading should be within view of the operative team. An audible system should be employed when possible to alert the team to the patient's pulse rate and oxygen saturation. Pulse oximetry has been strongly recommended as a necessary component of safe anaesthesia care by the WHO. If no functioning pulse oximeter is available, the surgeon and anaesthesia professional must evaluate the acuity of the patient's condition and consider postponing the surgery until appropriate steps are taken to secure one. In urgent circumstances to save life or limb this requirement may be waived, but in such circumstances the box should be left unchecked.

#### **DOES THE PATIENT HAVE A KNOWN ALLERGY?**

The checklist coordinator will direct this and the next two questions to the anaesthesia professional. First, the coordinator should ask whether the patient has a known allergy, and if so what it is. This should be done even if he or she knows the answer, in order to confirm that the anaesthesia professional is aware of any allergies that pose a risk to the patient. The appropriate box is then filled in. (If the coordinator knows of an allergy that

the anaesthesia professional is not aware of, this should be communicated at this time.)

#### **DOES THE PATIENT HAVE A DIFFICULT AIRWAY?**

Here the coordinator will verbally confirm that the anaesthesia team objectively assessed whether the patient has a difficult airway. There are a number of ways to grade the airway (such as the Mallampati score, thyromental distance, and Bellhouse-Doré score). An objective evaluation of the airway using a valid method is more important than the type of method itself. Anaesthesia death from airway loss is still a common disaster globally, and is generally preventable with appropriate planning. If evaluation indicates high risk of a difficult airway, the anaesthesia team must have full back-up preparations against an airway disaster. This will include, at a minimum, adjusting the approach to anaesthesia (for example, to a regional anaesthetic, if possible) and making emergency equipment accessible. Also, a capable assistant—whether a second anaesthesia professional, the surgeon, or a nursing team member—should not only be available but physically present to help with induction of anaesthesia in such cases. For a patient recognized to have a difficult airway, the checkbox should only be marked (and induction of anaesthesia begun) once the anaesthesia professional confirms that he or she has an adequate level of assistance present at the bedside.

#### **DOES THE PATIENT HAVE A RISK OF >1000CC BLOOD LOSS?**

In this safety step, the coordinator will ask the anaesthesia team whether the patient risks losing more than one liter of blood in surgery, in order to insure recognition of and preparation for this critical event. Large volume blood loss is among the most common and important dangers for surgical patients, but adequate preparation and resuscitation can mitigate the consequences considerably. Surgeons may not consistently communicate blood loss risk to anaesthesia and nursing staff. Therefore, if an anaesthesia professional does not know what the risk of major blood loss is in a case, he or she should stop to discuss the risk with the surgeon before induction of anaesthesia.

Having at least two large bore intravenous lines is recommended for patients at significant risk of blood loss. Because a lack of adequate IV access and resuscitation fluids becomes life-threatening in patients with >1000cc blood loss (or 15cc/kg in children) the checklist is designed to confirm that patients with this risk are recognized and resuscitation prepared for them,

including IV access and blood/fluid availability. (Note that the expected blood loss will be reviewed again by the surgeon during the Time Out. This will provide a second safety check for the anaesthesia professional and nursing staff.)

*At this point the Sign In is completed, and the team may proceed with anaesthetic induction.*

#### ***Time Out:***

The **Time Out** is a momentary pause taken by the team just prior to skin incision in order to confirm that several essential safety checks are made. It involves everyone on the team, including the surgeon, anaesthesia professional, and nursing staff.

#### **SURGEON, NURSE, AND ANAESTHESIA PROFESSIONAL VERBALLY CONFIRM PATIENT, SITE, PROCEDURE, POSITION**

This step is the standard “time out” or “surgical pause” and meets the standards of many national and international regulatory agencies. Just before the surgeon makes the skin incision, the person coordinating the checklist or another team member will ask everyone in the operating room to stop and verbally confirm the name of the patient, the surgery to be performed, the site of surgery, and positioning of the patient in order to avoid operating on the wrong patient or wrong site. Specifically, the circulating nurse might announce, “Let’s take our Time Out,” and then continue, “Does everyone agree that this is Patient X, undergoing a right inguinal hernia repair, supine positioning?” This box should not be checked until the anaesthesia professional, surgeon, and circulating nurse explicitly and individually confirm agreement. If the patient is not sedated, it is helpful for him or her to confirm the same as well.

#### **ANTIBIOTIC PROPHYLAXIS GIVEN IN LAST 60 MIN**

Despite strong evidence and wide consensus that antibiotic prophylaxis of wound infections is most effective if serum and/or tissue levels of antibiotic are achieved, surgical teams are inconsistent about administering antibiotics within one hour prior to incision. To reduce surgical infection risk, the coordinator will ask out loud during the Time Out whether prophylactic antibiotics were given during the last 60 minutes. The team member normally responsible for administering antibiotics (usually the

anaesthesia professional) should provide verbal confirmation. If prophylactic antibiotics have not been administered, they should be administered now, prior to incision. If prophylactic antibiotics have been administered longer than 60 minutes before, the team can decide whether to redose the patient or not, but the box should be left blank if no additional dose is given. If prophylactic antibiotics are not considered appropriate (e.g. cases without a skin incision, contaminated cases in which antibiotics are given for treatment), the “not applicable” box may be checked once the team verbally confirms this.

#### **ESSENTIAL IMAGING DISPLAYED**

Imaging is critical to insure proper planning and conduct of many operations, including orthopaedic/spinal procedures and many tumor resections. During the Time Out, the coordinator should ask the surgeon if imaging is needed for the case. If so, the coordinator should verbally confirm that the essential imaging is in the room and prominently displayed for use during the operation. Only then is the box checked. If imaging is needed but not available, it should be obtained. It will be up to the discretion of the surgeon as to whether to proceed without the imaging if it is necessary but unavailable. In such a circumstance, however, the box should be left unchecked. If imaging is not necessary, the “not applicable” box is checked.

#### **ANTICIPATED CRITICAL EVENTS**

Effective team communication is a critical component of safe surgery, efficient teamwork, and the prevention of major complications. To insure communication of critical patient issues, during the Time Out the checklist coordinator will guide the team through a swift discussion by the surgeon, anaesthesia staff, and nursing staff of critical dangers and operative plans. This can be done by simply asking the specified question of each team member out loud. The order of discussion does not matter, but each box is checked only after each discipline has provided its information. During routine procedures or those that the entire team is familiar with, the surgeon can simply state “This is a routine case of X duration” and then ask the anaesthesia professional and nurse if they have any special concerns.

##### **SURGEON REVIEWS: WHAT ARE THE CRITICAL OR UNEXPECTED STEPS, OPERATIVE DURATION, ANTICIPATED BLOOD LOSS?**

A discussion of “critical or unexpected steps” is intended, at a minimum, to inform others of any steps that put the patient at risk for rapid

blood loss, injury, or other major morbidity. This is also a chance to review steps that might require special equipment or preparations.

##### **ANAESTHESIA TEAM REVIEWS: WHAT ARE CRITICAL RESUSCITATION PLANS, PATIENT-SPECIFIC CONCERNS, IF ANY?**

In patients at risk for major blood loss, hemodynamic instability, or other major morbidity from the procedure, a member of the anaesthesia team should review out loud the specific plans and concerns for resuscitation—in particular, the intentions for use of blood products and any complicating patient characteristics or comorbidities such as cardiac or pulmonary disease or arrhythmia. It is understood that in many operations, there are no particularly critical risks or concerns to share with the team. In such cases, the anaesthesia professional can simply say, “I have no special concerns for this case.”

##### **NURSING TEAM REVIEWS: WHAT ARE THE STERILITY INDICATOR RESULTS, EQUIPMENT ISSUES, OTHER PATIENT CONCERNS?**

The scrub nurse or technologist who sets out the instruments for the case should verbally confirm that a sterility indicator was used during the sterilization process and that it verifies the instruments were successfully sterilized. Discrepancy between the expected and actual sterility indicator results should be reported to team members and addressed before proceeding with incision. This is also an opportunity to discuss any problems with equipment and other preparations for surgery or any safety concerns the scrub or circulating nurse may have, particular ones not addressed by the surgeon and anaesthesia team. If there are no particular concerns, however, the scrub nurse/technologist can simply say, “Sterility was verified. I have no special concerns.”

#### **OTHER CHECKS**

Teams should consider adding other safety checks for specific procedures. The aim is to use the Time Out as an opportunity to verify that critical safety steps are consistently completed. Before the Time Out begins, it is recommended that each person in the room identifies him or herself by name and verbalized their role during the operation. Additional steps should include confirmation of venous thromboembolism prophylaxis using mechanical means, such as sequential compression boots and stockings, and/or medical means, such as heparin or warfarin when indicated; the availability of essential implants (such as mesh or a prosthetic); and review of critical preoperative biopsy results, laboratory results, or blood type.

*At this point the Time Out is completed, and the team may proceed with the operation.*

### **Sign Out:**

The **Sign Out** should be completed prior to the removal of the surgical drapes. It may be initiated by the circulating nurse, surgeon, or anaesthesia professional, and is ideally accomplished during final preparation of the wound and before the surgeon has left the room. The surgeon, anaesthesia professional, and nurse should review important intraoperative events (in particular those that might not be readily apparent to the other team members), the postoperative management plan, and confirm the specimen labelling and sponge and needle counts. Each box is checked only after the specified individuals review out loud all of the outlined elements of their sign out.

#### **SURGEON REVIEWS WITH ENTIRE TEAM:**

- **WHAT PROCEDURE WAS DONE**
- **IMPORTANT INTRA-OPERATIVE EVENTS**
- **MANAGEMENT PLAN**

In order to insure effective planning for patient recovery, the person coordinating the checklist should ask the surgeon to review three things out loud: (1) Exactly what procedure was done, as the procedure may have changed or expanded, depending on intraoperative findings or technical difficulties; (2) Important intraoperative events, by which is meant any event during surgery that may put the patient at increased risk during the postoperative period (such as a finding of unexpected infection or tumor; an injury to a nerve, vessel, or organ; or concern with the technical execution of the case, such as an anastomosis); (3) The post-operative management plan, in particular instructions involving wound care, drains, specific medications, and patient management issues that may not be evident to all involved. If the procedure was routine and went according to plan, the surgeon can simply state “This was a routine procedure and I have no special concerns.”

#### **ANAESTHESIA PROFESSIONAL REVIEWS WITH ENTIRE TEAM:**

- **IMPORTANT INTRA-OPERATIVE EVENTS**
- **RECOVERY PLAN**

The coordinator should ask the anaesthesia professional to review out loud any anaesthetic events that occurred during the procedure,

particularly those not evident to the entire team. Such events may include hypotension, heart rate or rhythm abnormalities, and airway, fluid, or intravenous access difficulties. The anaesthesia professional should then review any recommended additions to the management plan for postoperative recovery. If there are no critical events or additions to the recovery plan to communicate, the anaesthesia professional can simply state, “The anaesthesia was routine and without special concerns.”

#### **NURSE REVIEWS WITH ENTIRE TEAM:**

- **INSTRUMENT AND SPONGE COUNTS**
- **SPECIMEN LABELLING (INCLUDING PATIENT NAME)**
- **IMPORTANT INTRA-OPERATIVE EVENTS/RECOVERY PLAN**

Retained instruments or sponges and incorrect labelling of pathologic specimens are uncommon but persistent and potentially calamitous errors. The scrub or circulating nurse should therefore verbally confirm the completeness of final instrument and sponge counts. The nurse should also confirm the labelling of any pathologic specimens obtained during the procedure by reading out loud the patient’s name, the specimen description, and any orienting marks. The circulating and/or scrub nurse should review out loud with the team any important intraoperative events or plans for recovery unaddressed by the other team members. These may include safety problem during the case and management plans for dressings, drains, medications, and fluids that remain unclarified.

*With this final step, the safety checklist is completed. If desired, the checklist can be signed, dated, and placed in the patient record, or simply retained for quality assurance review.*

#### **ADDITIONAL NOTES – INTRODUCING A SAFETY CULTURE:**

It will take some practice for teams to learn to use the checklist effectively. Some individuals will feel it is an imposition or even a waste of time. The goal is not to produce rote recitation or to frustrate workflow. It is intended to provide teams with a simple, efficient set of priority checks for improving effective teamwork and communication—and **encouraging active consideration for the safety of patients in every single operation that is done.** Many of the steps of the checklist are already followed in

operating rooms around the world. Few operating rooms, however, follow all of them or ensure the level of explicit attention that consistency requires. The checklist provides a tool for two purposes: enabling consistency in safety for patients and introducing (or maintaining) a culture that values achieving it.

Successful implementation requires adapting the checklist to local routines and expectations. This will not be possible without sincere commitment by hospital leaders. For the checklist to succeed, the chiefs of surgery, anaesthesia, and nursing will need to publicly embrace the belief that safety is a priority and the use of the checklist to help make it so. This should include their personally using the checklist in their own cases and their regularly asking others how the process of implementation is going. If there is not demonstrable leadership, then instituting a checklist of this sort will breed only discontent and antagonism.

Lastly, in order to insure brevity, the surgical safety checklist is not designed to be exhaustive. Each individual facility will have additional safety steps that are followed. Each locale is therefore encouraged to reformat, reorder, or revise the checklist to accommodate local practice while insuring the completion of its critical safety steps.