

Checklists reduce stress and mistakes. In medical settings, human errors, particularly in surgery and veterinary care, can have severe consequences. Implementing checklists, like the WHO Surgical Safety Checklist, and fostering a Patient Safety Culture can minimize errors, support teams, and save lives.



#### **Minimizing Mistakes in Veterinary Surgery**

#### Click here to see our Anesthesia Machines online.

Checklists are now essential to my daily routine. They keep me organized and calm when I feel overwhelmed. But I wasn't always this way—camping taught me their value.

For the past decade, my family and I have camped in the Finger Lakes region of New York. While my wife was a seasoned camper, it was all new to me. At first, I was meticulous about packing, double-checking every detail. But over time, packing became routine. I grew confident—maybe too confident. I started assuming I had everything handled, and small mistakes crept in.

On one trip, I forgot an extension cord needed to power the camper. The cord had always been in its usual spot—until it wasn't. That mistake cost me an 80-minute round trip into town, sixty dollars, and valuable time with my family. Frustrated, I sat down and created a detailed checklist.

That list changed everything. It saved time, reduced stress, and turned camping into a smoother, more enjoyable experience. Now, I don't just use checklists for camping—I use them as a daily habit that helps me stay prepared for whatever comes my way.

Forgetting something on a camping trip is a minor inconvenience. But in a surgical setting, missing a critical step can have devastating consequences. Hospitals for humans learned this lesson the hard way. Studies have shown that surgical errors, including wrong-site surgeries and retained surgical instruments, often can be traced back to overlooked details. A study published by JAMA Network found that human errors contributed to more than half of complications in major surgeries across three large academic medical institutions.

Similarly, human errors dramatically impact veterinary care. An American Veterinary Medical Association (AVMA) study, titled "Patient Safety Culture is Needed in Veterinary Medicine," describes research across 130 veterinary hospitals. 42% of human-caused incidents resulted in patient harm, with 5% leading to patient death. And while only 7% of reported incidents were anesthesia-related, they accounted for 26% of reported fatalities.





Author, Tim Keohane, is a vice president at A.M. Bickford.

#### Resources:

https://pubmed.ncbi.nlm.nih.gov/19144931/

https://www.aaha.org/wp-content/uploads/ globalassets/02-guidelines/2020-anesthesia/anesthesia\_and\_monitoring\_guidelines\_final.pdf

https://cdn.who.int/media/docs/default-source/patient-safety/safe-surgery/starter\_kit-sssl.pdf?sfvrsn=9cef94b8\_7

https://www.who.int/teams/integrated-health-services/patient-safety/research/ safe-surgery/tool-and-resources

https://www.magonlinelibrary.com/doi/abs/10.12968/vetn.2022.13.2.83

#### **Minimizing Mistakes in Veterinary Surgery**

Mistakes are inevitable—we're all human. The goal, however, is to minimize them. One key solution, as recommended by the AVMA, is establishing a Patient Safety Culture (PSC). PSC defines "the way we do things around here" in terms of patient safety, and is shaped by beliefs, values, attitudes, and behaviors that reinforce an organization's commitment to quality care. Creating a PSC culture is a team effort but it starts at the top — leaders must embody the behaviors and attitudes they expect from employees

A strong PSC benefits both patients and veterinary teams. When a serious error occurs, staff involved may experience the second-victim effect — a loss of confidence and emotional distress that can impact their well-being and future performance. By fostering a positive safety culture and open communication, teams can reduce harm, learn from mistakes, and recover more effectively.

Another effective solution to reducing mistakes caused by human errors is the implementation of the World Health Organization (WHO) Surgical Safety Checklist. The checklist, introduced in 2008, was designed to enhance communication, teamwork, and adherence to safety protocols before, during, and after surgery. Studies have shown that its use significantly decreases complications and mortality rates. The checklist helps the medical teams and support staff ensure that key steps—such as confirming patient identity, marking surgical sites, reviewing anesthesia risks, and verifying instrument counts—are completed systematically, which helps minimize preventable mistakes in the operating room.

Surgical mistakes are a serious issue, not just in human medicine but also in veterinary care. Errors happen, but the goal is to minimize them. Creating a Patient Safety Culture (PSC) encourages teamwork—teams learn from mistakes and improve communication. The WHO Surgical Safety Checklist adds another layer of protection by making sure critical steps aren't missed during procedures. When hospitals and clinics use both approaches together—promoting a strong safety culture and following structured checklists—they can cut down on errors, support their teams, and ultimately save more patients' lives.



Procedure: Team: Patient ID: PRE-ANESTHETIC PRIOR TO CLOSURE Patient name & procedure confirmed Instrument Count Owner consent confirmed Swab Count IV cannula placed & patent **Needle Count** Airway equipment available & functioning: ET cuffs checked **POST CLOSURE**  Anesthesia machine checked All planned procedures performed Enough oxygen to support patient Mouth packs / rectal swabs removed o Breathing system working & correctly connected Assessment & intervention plan confirmed Person assigned to monitor patient Analgesic plan confirmed Risks identified & communicated Emergency interventions available RECOVERY PRE-PROCEDURE Safety concerns communicated: Patient name & procedure confirmed Airway Monitoring equipment attached Breathing Depth of anesthesia appropriate Circulation Surgery site prepped Body temperature Safety concerns communicated Pain Instrument count Assessment & intervention plan confirmed Swab count Analgesic plan confirmed Needle count Person assigned to monitor patient

**Surgical Safety Checklist** 

Adapted from the Royal College of Veterinary Surgeons Knowledge Surgical Safety Checklist



# **Surgical Safety Checklist**





### Patient Safety

# Before induction of anaesthesia

(with at least nurse and anaesthetist)

Has the patient confirmed his/her identity, site, procedure, and consent?  Yes  Is the site marked? Not applicable Is the anaesthesia machine and medication check complete? Yes  Is the pulse oximeter on the patient and functioning? Noes the patient have a:  Known allergy? No Yes  Difficult airway or aspiration risk?
Is the anaesthesia machine and medication check complete?
Is the pulse oximeter on the patient and functioning?
Does the patient have a:
Known allergy?  □ No □ Yes
Difficult airway or aspiration risk? ☐ No
Yes, and equipment/assistance available
Risk of >500ml blood loss (7ml/kg in children)?
<ul> <li>Yes, and two IVs/central access and fluids planned</li> </ul>

## Before skin incision

(with nurse, anaesthetist and surgeon)

<ul> <li>Confirm all team members have introduced themselves by name and role.</li> </ul>
---

Confirm the patient's name, procedure, and where the incision will be made.

Has antibiotic prophylaxis been given within the last 60 minutes?

YesNot applicable

## **Anticipated Critical Events**

#### To Surgeon:

- ☐ What are the critical or non-routine steps?
- How long will the case take?
- ☐ What is the anticipated blood loss?

### To Anaesthetist:

☐ Are there any patient-specific concerns?

### To Nursing Team:

- Has sterility (including indicator results) been confirmed?
- Are there equipment issues or any concerns?

## Is essential imaging displayed?

- ☐ Yes
- Not applicable

# Before patient leaves operating room

(with nurse, anaesthetist and surgeon)

## **Nurse Verbally Confirms:**

- ☐ The name of the procedure
- Completion of instrument, sponge and needle counts
- Specimen labelling (read specimen labels aloud, including patient name)
- Whether there are any equipment problems to be addressed

# To Surgeon, Anaesthetist and Nurse:

What are the key concerns for recovery and management of this patient?