*Southern African Journal of Anaesthesia and Analgesia.* 2021;27(4 Suppl 1):S1-55
https://doi.org/10.36303/SAJAA.2021.27.4.S1
Open Access article distributed under the terms of the
Creative Commons License [CC BY-NC 3.0]
http://creativecommons.org/licenses/by-nc/3.0

South Afr J Anaesth Analg
ISSN 2220-1181 EISSN 2220-1173
© 2021 The Author(s)
GUIDELINE

# Guidelines for infection control and prevention in anaesthesia in South Africa

***This is a consensus document produced by members of a working party established by the South African Society of Anaesthesiologists.***

The working party that developed the first version of these guidelines comprises:

- Raphael Samuel, Chair, Anaesthesia
- Dorinka Nel, Anaesthesia
- Ivan Joubert, Anaesthesia and Intensive Care
- Johann de Bruin, Anaesthesia
- Sean Dwyer, Anaesthesia
- Adolf Fourie, Anaesthesia
- Sailuja Naidu, Anaesthesia
- Reshmi Samuel, Virology
- Yacoob Coovadia, Microbiology

The working party for the first revision of the guidelines comprises:

- Dorinka Nel, Chair, Anaesthesiology
- Maria Fourtounas, Anaesthesiology
- Samantha Green, Anaesthesiology and Intensive Care
- Megan Wellbeloved, Anaesthesiology
- Ina Buitenbos, Nursing
- Kim Roberg, Physician

## Chapter 1: Introduction

*"The very first requirement in a hospital is that it should do the sick no harm." – Florence Nightingale*

*Primum non nocere* (first do no harm), the ancient adage inferred in the *Hippocratic oath* is a potent reminder of the risk and potential harm associated with the practice of medicine.[1] Hospital-acquired infections (HAIs) cause significant morbidity and mortality to patients and deplete already constrained healthcare budgets. It is estimated that approximately one in seven patients entering hospitals in South Africa is at high risk of acquiring HAIs.[2] The irony of unsafe infection control practices is that they may place patients at risk of greater morbidity or mortality than would derive from the illness being treated. Appropriate anaesthesia practices can decrease the incidence of HAIs.[3]

Poor infection control practices in anaesthesia in South Africa have been lamented in previous studies. The reinforcement of the basic tenets of infection control has been called for, as well as the need for a national guideline to prevent HAIs.[4-7] Health care in South Africa encounters different challenges to those of many other countries. In addition, different regions face unique challenges in South Africa. The high prevalence of human immunodeficiency virus (HIV) in South Africa (up to 65% in seroprevalence studies in certain areas, coupled with the high prevalence of hepatitis B in adults of 8.3–10%),[8] creates an optimal environment for the possible transmission of blood-borne viruses following poor infection control in hospitals. Also, higher rates of HIV and hepatitis B co-infection have been noted in rural areas where adequate infection control may be more difficult to achieve, i.e. 6% (urban) compared to 16.2% (rural).

Thus, the high prevalence of infectious diseases and tuberculosis emphasises the need for evidence-based and strict infection control policies. Furthermore, the narrow margin for error in infection control in South African hospitals is reiterated. Therefore, health policy needs to balance cost constraints with the economic burden of HAIs.

Where there is harm, mention of the law often follows. In keeping with international legal trends in medical liability and litigation,[9] the decision as to whether or not a hospital will be held legally liable for harm to patients as a result of HAIs is dependent on the following:

- Has the hospital introduced best practice infection control measures?
- Has the hospital negligently or intentionally failed to implement designated infection control measures?
- Have hospital staff members, while acting in the course and scope of their employment, negligently or intentionally failed to comply with hospital infection control measures and caused harm to patients?[10]

While economic benefit and legal concerns are important reasons to promote infection control practices, non-maleficence must be

the overriding principle of all policy and decision-making in this regard. Therefore, it is the heart of these guidelines.

With the current SARS-CoV-2 (COVID-19) pandemic wreaking havoc across the globe, protection of healthcare workers and their patients has been pushed to the forefront. Healthcare workers must first ensure that they are optimally protected against infections so that they do not transmit pathogens to their patients and that they are healthy enough to provide medical services to patients. The pandemic forced healthcare workers to strongly consider infection prevention and control strategies. With a receptive audience, this is probably the ideal time for the release of this updated version of the infection control guidelines.

Two new chapters have been added to this version. One is aimed at environmental considerations with regards to infection control whilst the other one deals with basic measures when caring for the already infectious patient.