# SURGICAL SITE INFECTION PREVENTION Key facts on patient bathing and hair removal



### THINGS YOU SHOULD KNOW What does the World Health Organization (WHO) recommend?

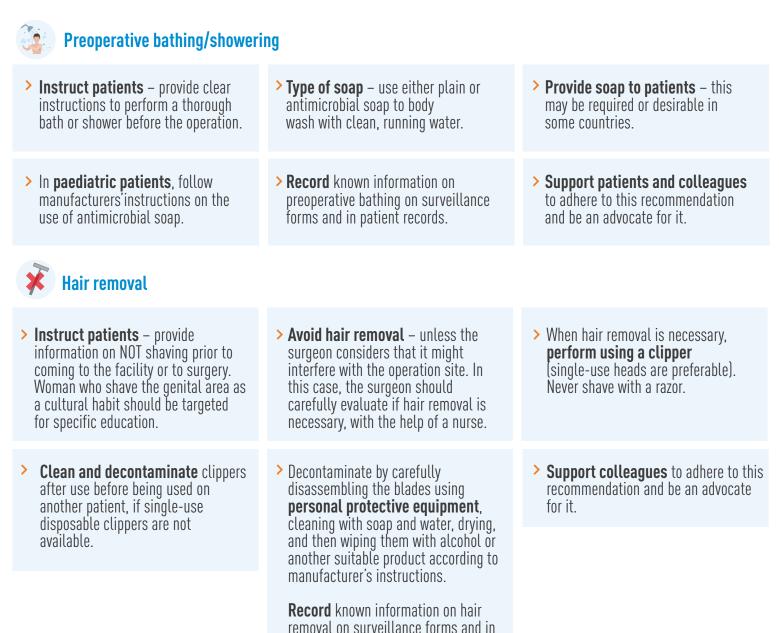
The 2016 WHO Global guidelines for the prevention of surgical site infections (SSIs) recommend that:

it is good clinical practice for patients to **bathe or shower before surgery** with either a plain or antimicrobial soap; in patients undergoing any surgical procedure, **hair should either NOT be removed or, if absolutely necessary, only removed with a clipper**. Shaving is strongly discouraged at all times, both preoperatively and in the operating room.

The evidence base is focused on adult patients, but the recommendations are also considered valid for paediatric patients.



# WHAT should be done?



patient records.

#### World Health Organization

## WHEN should the recommendations be applied?

- > These recommendations are applicable in the **preoperative period**.
- > It is useful to perform patient bathing or showering on the **day of the operation or the day or night before**.
- > Hair removal, if absolutely necessary, should be done **shortly before the operation**.



### WHO should support these recommendations to ensure successful implementation?

- > Patient education and engagement are critical to achieve these recommendations.
- > Depending on where the facility/surgical services stand with regards to these recommendations, the following staff should be involved in putting them in place or updating local policies/standards or improving compliance with the recommendations:
- 1 **surgical teams**, including outpatient clinic staff involved in preoperative patient information and preparation, and surgical ward staff;
- 2 operating room and surgical teams, in particular surgeons regarding the avoidance of hair removal or performing it with clippers;
- **3 infection prevention and quality improvement** teams to facilitate uptake/update of standard procedures and best practices related to the recommendations and to support monitoring of staff compliance;

- 4 procurement services to obtain plain or antimicrobial soap;
- **5 senior administrators** (including finance managers) should be involved in decision-making on implementing the recommendation and to ensure that an adequate budget is available for the provision of necessary supplies (for example, soap, clippers), thus motivating staff to comply with the recommendations in the context of an institutional safety climate and culture.



### KEY FACTS WHY are these recommendations important?

- Infection is the most frequent complication of surgery in Africa and SSIs are the most frequent type of infection acquired in health care in lowand middle-income countries. In Europe and the United States of America, SSIs are the second most frequent type of health care-associated infection and the most frequent type on admission.
- The scientific evidence shows that either no hair removal or clipping is associated with a significantly lower risk of SSI when compared to shaving. The risk of SSI is higher when hair removal is performed by razor than by a clipper because shaving causes small abrasions to the skin.

Evidence shows that the use of a depilatory cream has neither benefit nor harm when compared to shaving for the prevention of SSI. Additional drawbacks are the necessity to leave them in place for approximately 15-20 minutes for the hair to be dissolved and the potential for allergic reactions.

- The summaries of the systematic reviews of the evidence supporting these recommendations can be found within the WHO Global guidelines for the prevention of SSI (http://www.who.int/infection-prevention/publicati ons/ssi-guidelines/en/) and their Appendices (http://www.who.int/infection-prevention/publicati ons/ssi-web-appendices/en/).
- > A preoperative shower or bath ensures that the skin is as clean as possible and reduces the skin bacterial load, especially bacterial colony counts at the site of surgical incision. Scientific evidence shows that preoperative bathing with antimicrobial soap containing chlorhexidine gluconate has no benefit in reducing the SSI rate compared to plain soap.
- > Additional WHO implementation tools and resources are available at (http://www.who.int/infection-prevention/ tools/surgical/en/).