

جامعة ساوة الاهلية
كلية التقنيات الصحية والطبية
قسم التخدير - اللجنة العلمية

Operating Theatre Design



جامعة ساوة

كلية التقنيات الصحية والطبية

قسم تقنيات التخدير

المرحلة الثانية

Operation Room Size

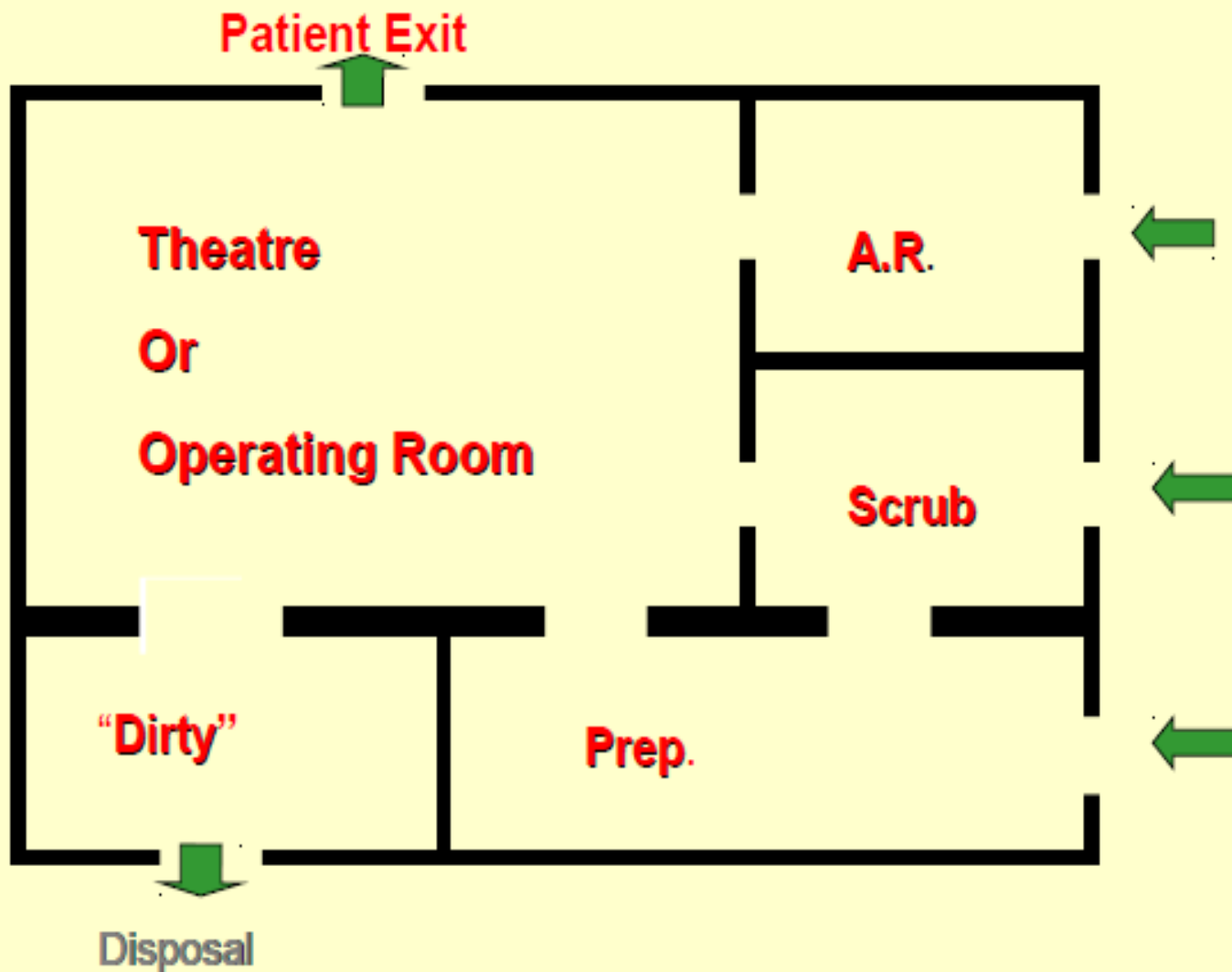
the Facility Guidelines Institute recommends that the minimum inpatient operating room size be no less than **400 square feet**.

Estimated Industry-Standard Operating Room Sizes

- ❖ Small Operation Room – **400 square feet**
- ❖ Standard Operation Room – **500 square feet**
- ❖ Orthopedic Operation Room – **600 square feet**
- ❖ Cardiac Operation Room – **600 square feet**
- ❖ Neurological Operation Room – **600 square feet**
- ❖ Transplant Operation Room – **800 square feet**



The Built Environment



Theatre Air Conditioning

“Ideal” conditions *-

Temperature- 18 to 23 OC

Humidity - 50 to 60%

Air Changes- 20 per hour

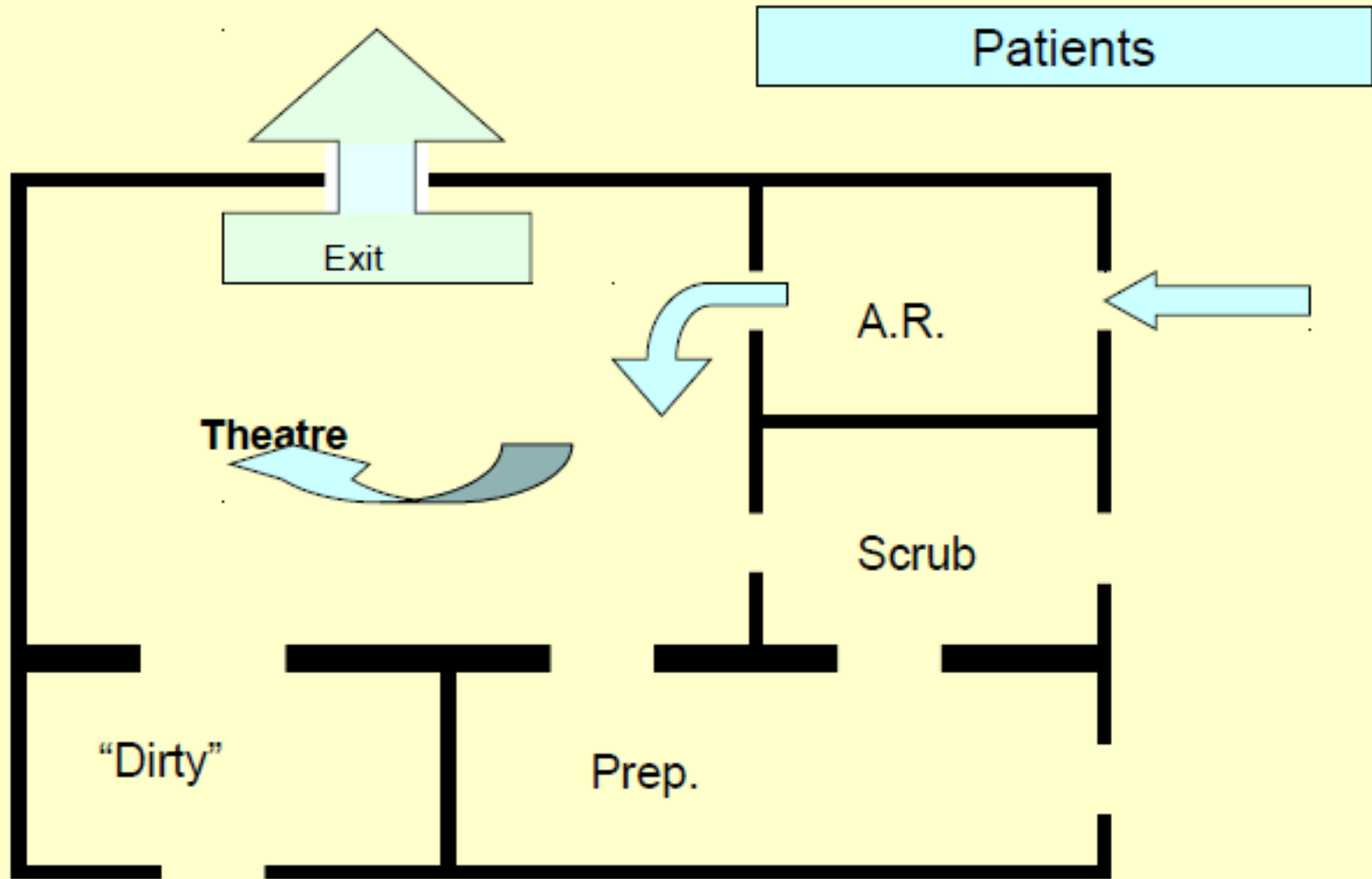
:Note

In the first hour it is common for healthy patient's temperature decrease **0.5-1.5 °C** as anesthesia causes rapid decrease in core temperature.

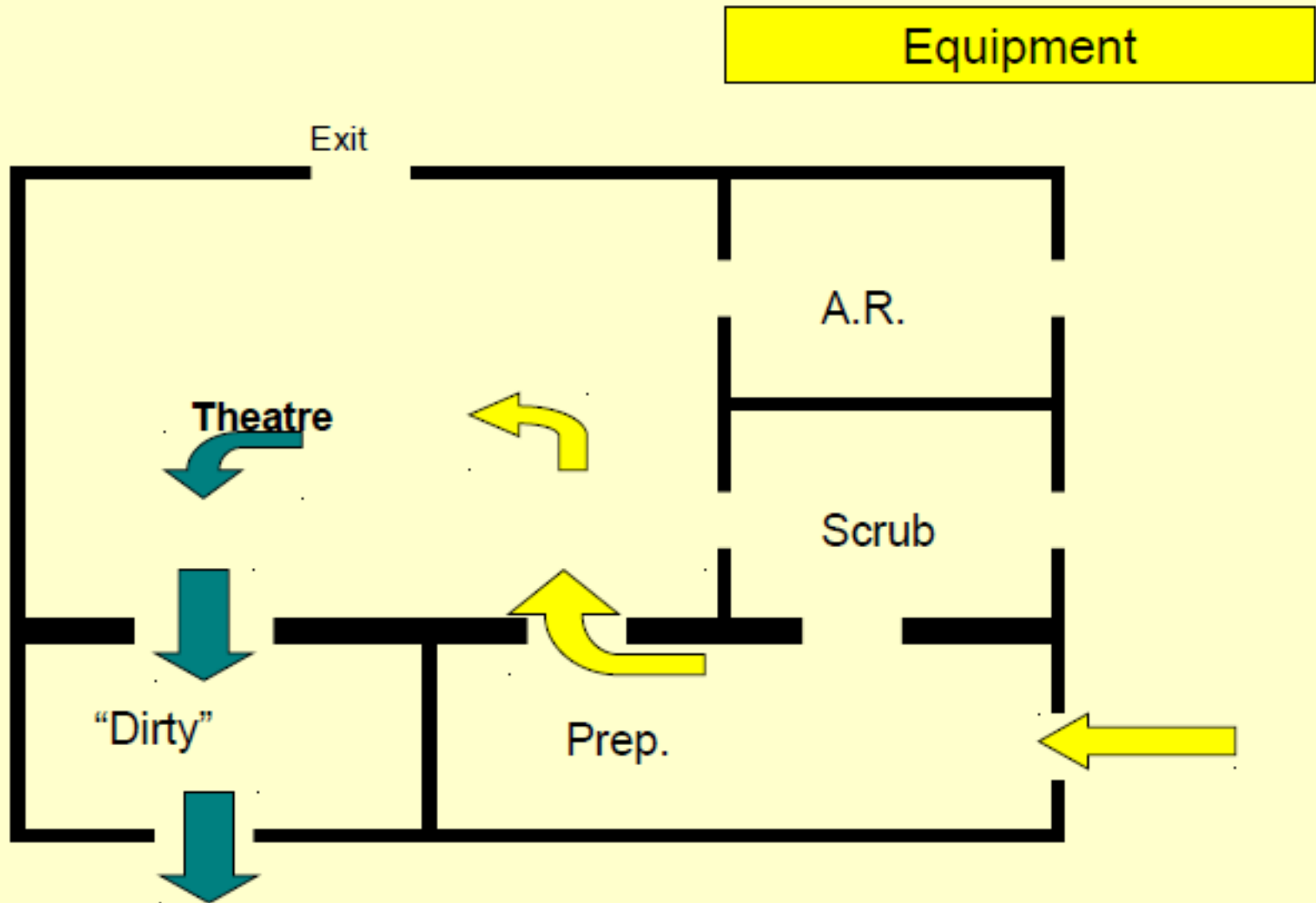
One study found that the most efficient method of maintaining normothermia included using warm wraps and a heating blanket. Additionally, pre-warming for **thirty minutes** may prevent **hypothermia**.



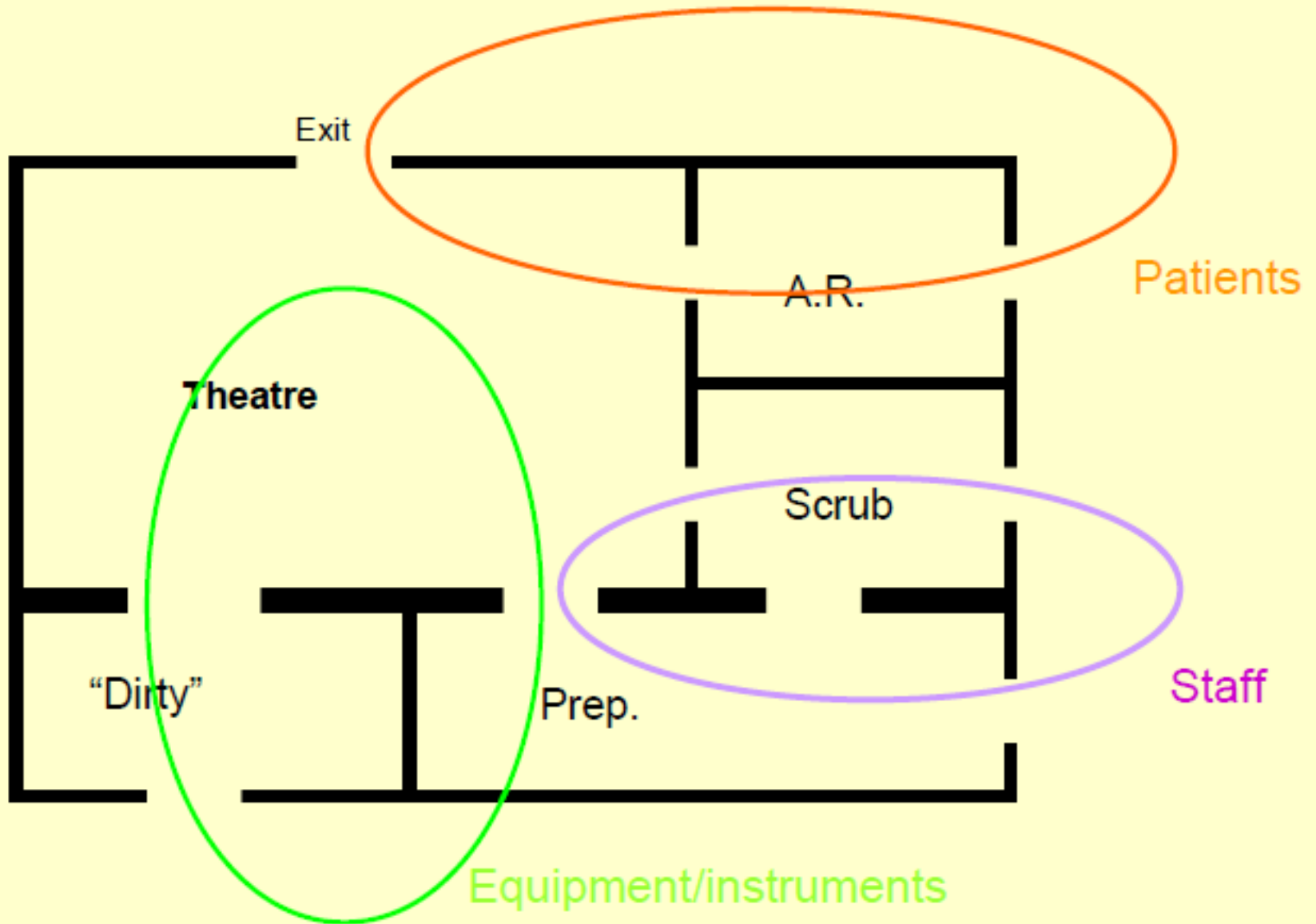
“Traffic Patterns”



“Traffic Patterns”

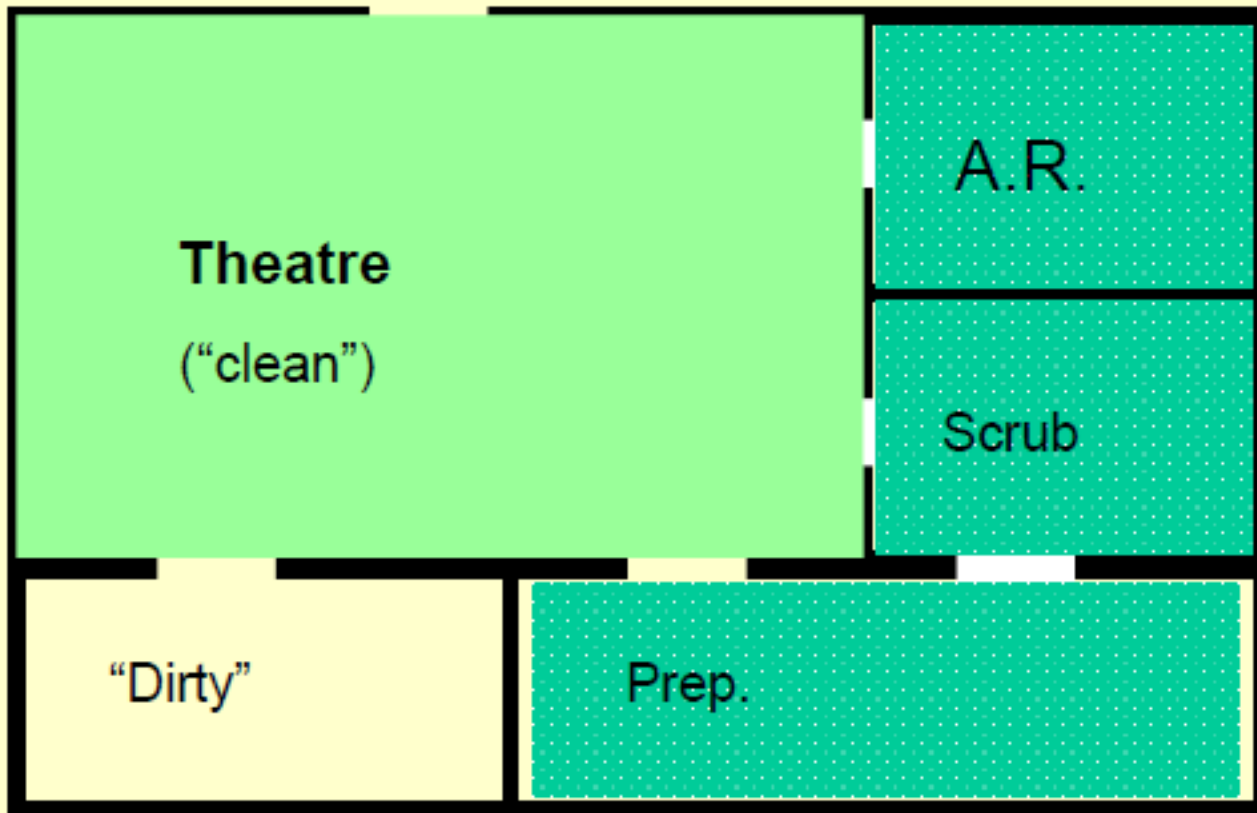
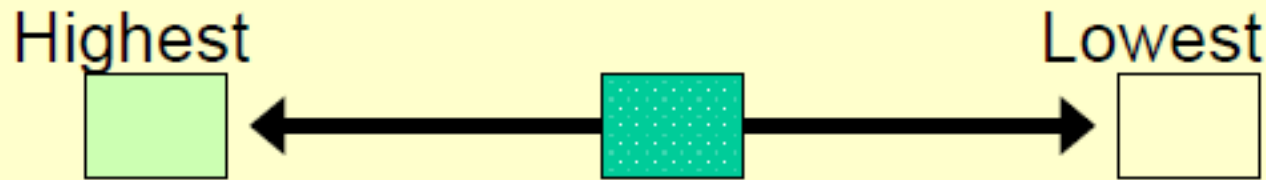


“Traffic Patterns”



Pressure Gradients

Keep doors closed as much as possible to maintain these



Pressure dampers

Intention = Air flow is from "clean" to "dirty"

Scrub room



For hand
washing
(surgical scrub)
gowning &
gloving of
surgical team

Prep / instrument room

Sometimes situated off the Operating room.
Storage of instruments & supplies



The Operating Room (Theatre)



Focal point
of surgical
process

Anaesthetic Room



- Reception & preparation of patient
- Induction of anaesthesia

Rest/coffee room



- Does exactly what it says on the tin!
- A place to relax.
- Beware of careless conversations!
- Patient confidentiality still applies

Sterile Processing Room

These sterile processing rooms are designed to be separate from the operating suite but may be shared between two or more operating rooms. Sterile processing rooms are designed to provide a **one-way traffic pattern of contaminated materials, instruments for cleaning**, and the sterilization of various instruments and equipment.



Storage must be appropriate & adequate



Note

'Exp': means for use up to and until the last day of the specified month.

'Use by': means for use up to and until the last day of the specified month.

'Use before': means for use until the first day of the specified month.

Batch: **645981**

Exp: **31/3/09**

Batch: **645981**

Use before: **Apr 09**

Drug ampoule labels





Logo Code B3253 POM PA 167/50/3

400 Do not administer simultaneously with blood
Do not use unless solution is clear and
container is undamaged
Store out of reach of children
Check additive compatibility before use
For use under medical supervision
300 Store below 25 °C

Each 500ml contains:
Sodium Chloride 2.25g
Anhydrous Glucose 25g
Hydrochloric Acid
200 Water for injections 0.84 (200kcal)
megajoules (approx) 432
mOsmols (approx) 37.5mmol
Sodium Chloride 37.5mmol
100 Hypertonic 11

500ml Intravenous Infusion BP

0.45% Sodium Chloride
5% Glucose

Lot Use by



SCAN TO GET THE LECTURE

