

ANESTHETIC EQUIPMENT

Operating Theatre Design

Sawa University

جامعة ساوة الاهلية

College of health and medical techniques

كلية التقنيات الصحية والطبية

Department of Anesthesia

قسم تقنيات التخدير

.....second..... Stage

.....المرحلة الثانية.....

محاضرة رقم (1)

نظري

Lecture No.1

Theoretical

استاذ المادة : د. حسن جساب البركي

Operation Room Size

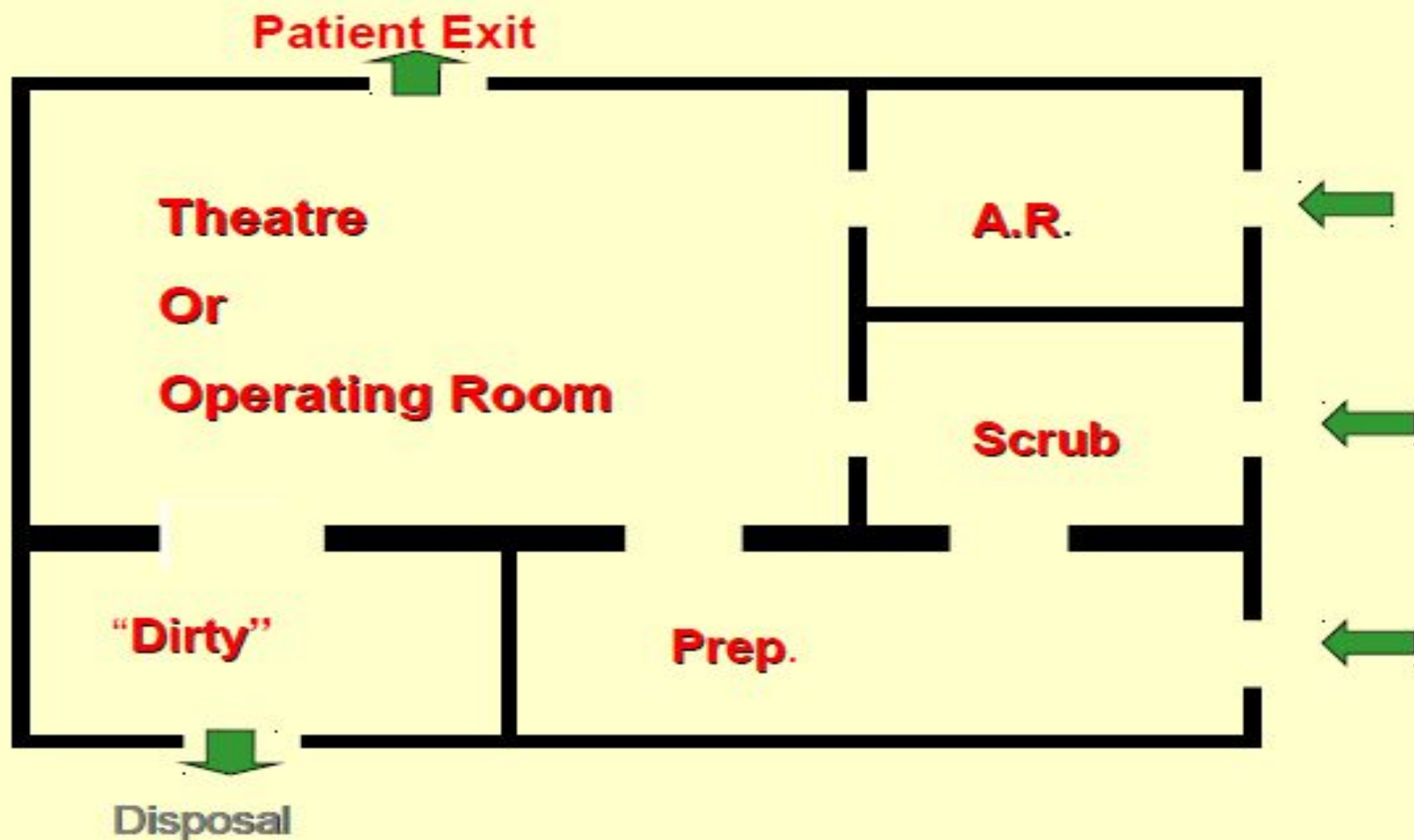
the Facility Guidelines Institute recommends that the minimum inpatient operating room size be no less than **400 square feet**.

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

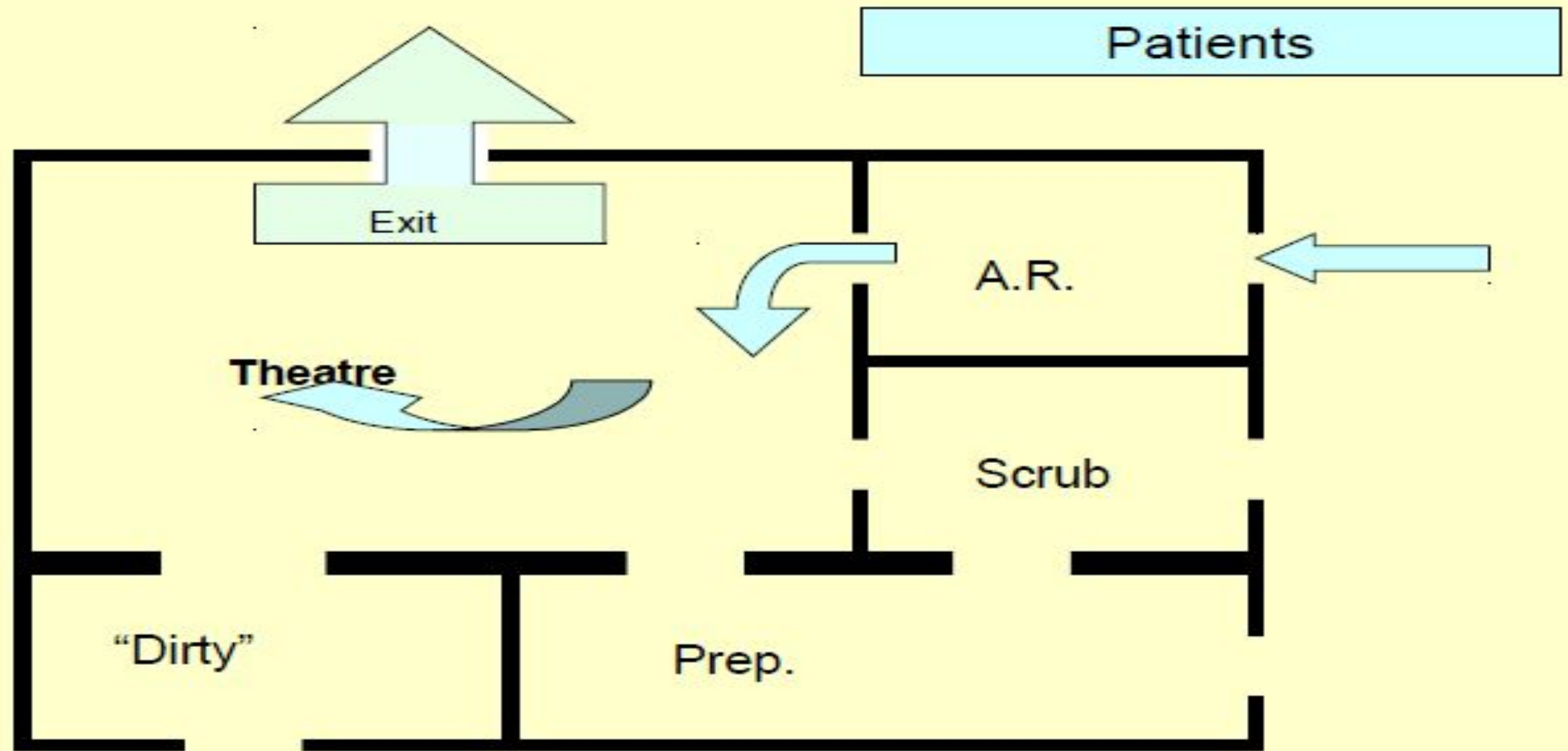
:Note

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.

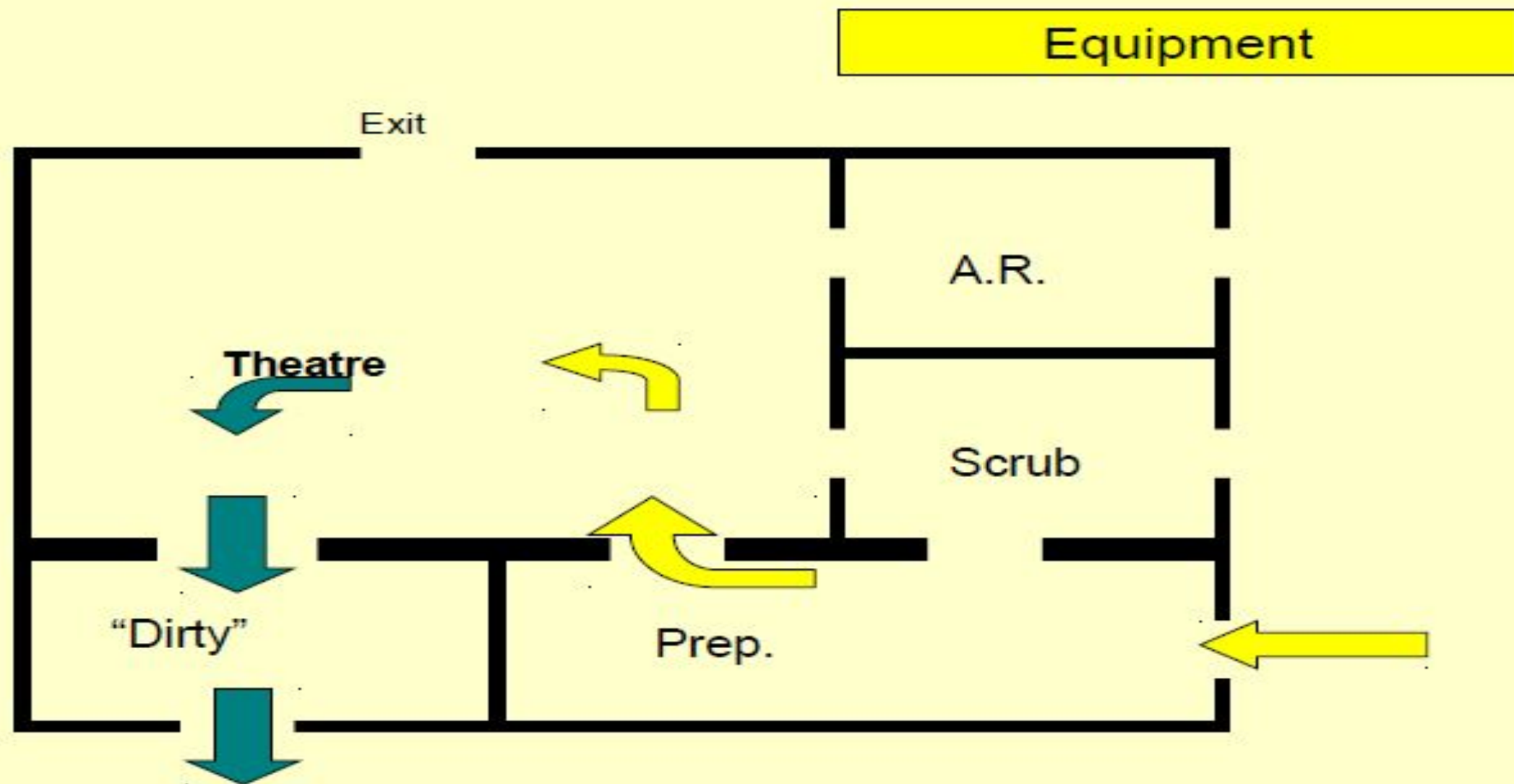
One study found that the most efficient method of maintaining normothermia included using warm wraps and a heating blanket. Additionally, pre-warming for **thirty minutes** may prevent **hypothermia**.



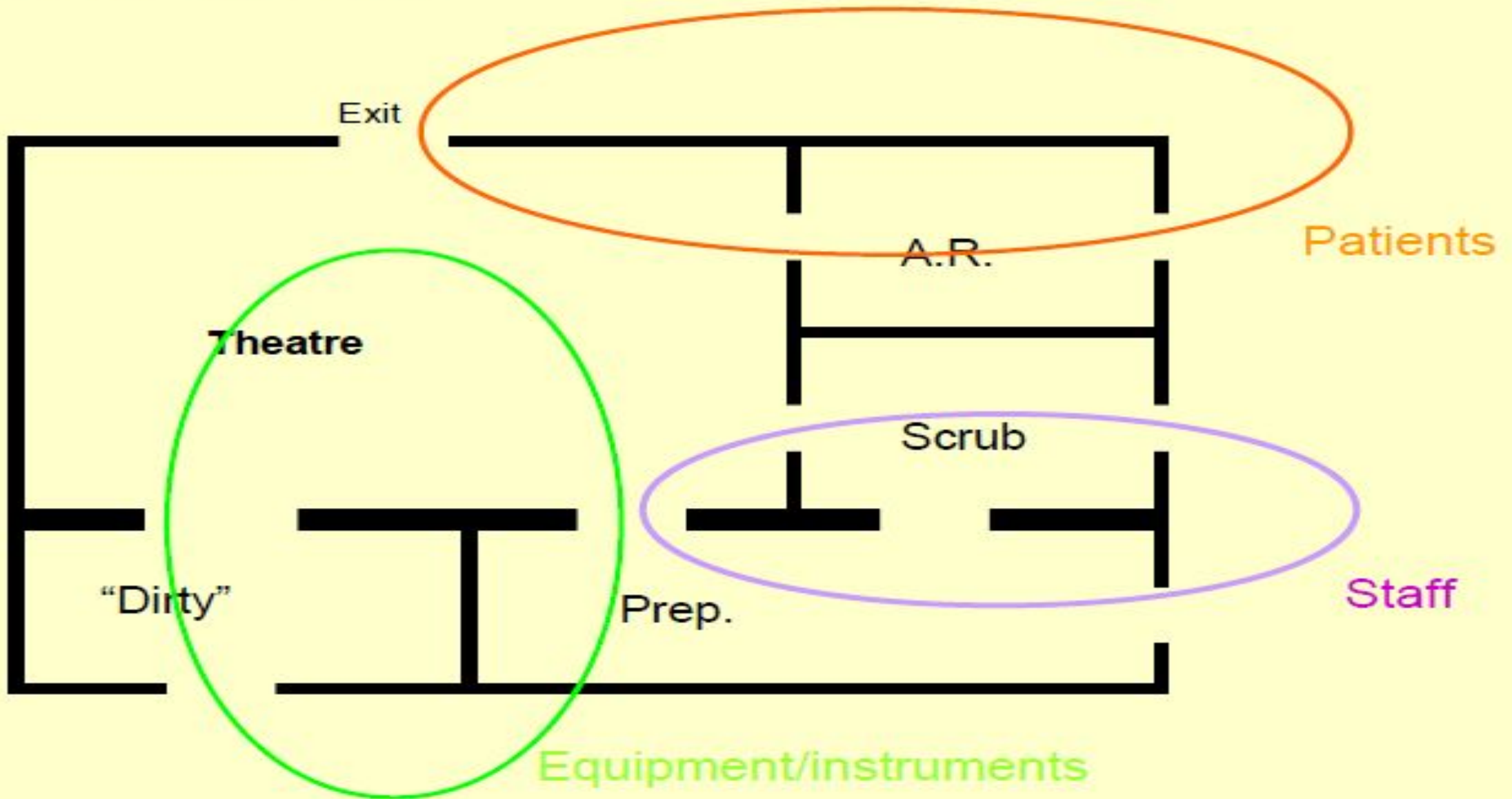
“Traffic Patterns”



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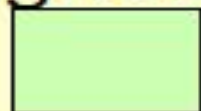
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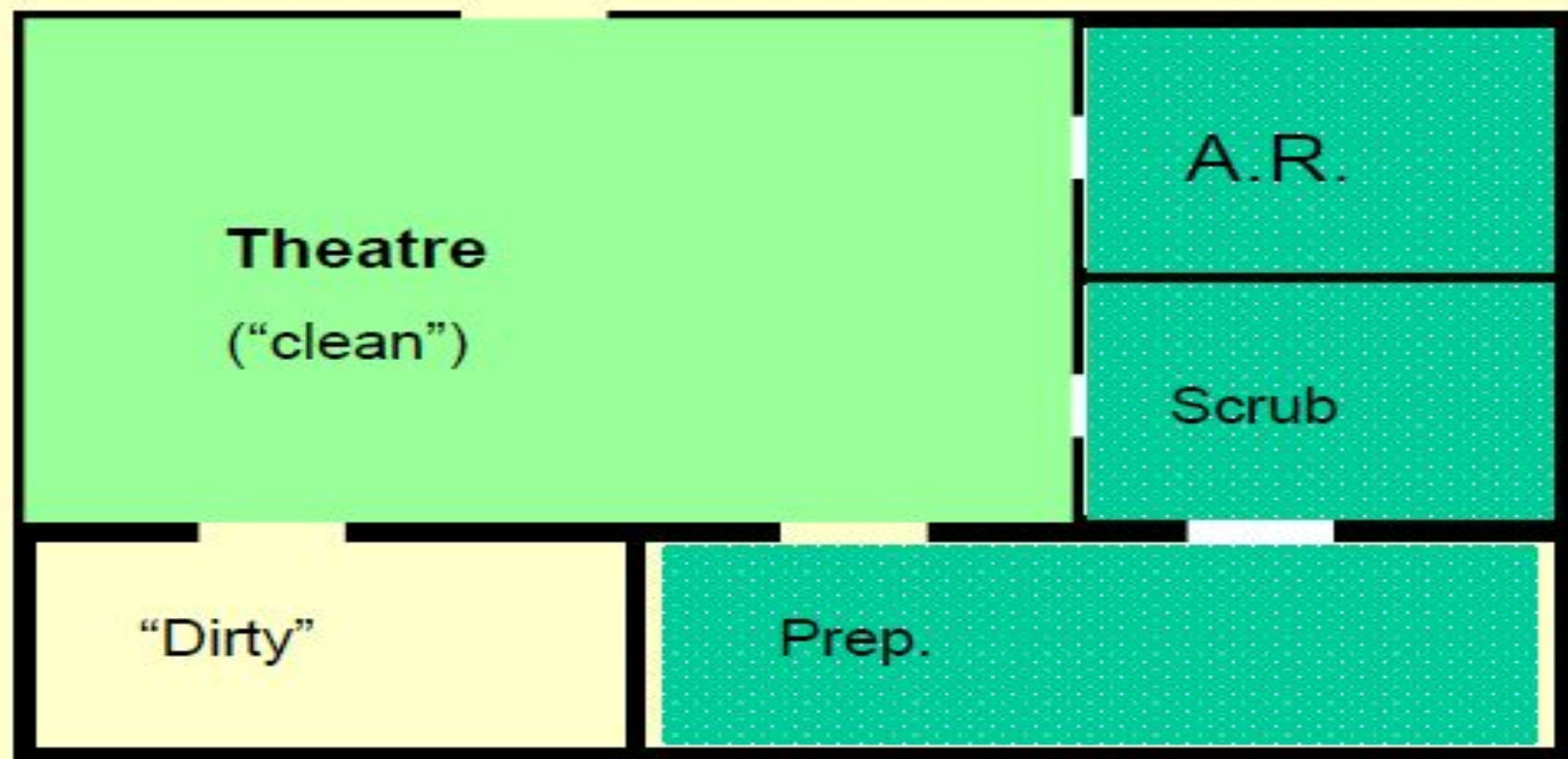
Pressure Gradients

Keep doors closed as much as possible to maintain these

Highest



Lowest



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



Pressure dampers

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



Any questions?

*Thank
You*