

Neonatal Isolation Room



Office of Safety Network

service
education
research

Feb 2011

PATIENTS. AT THE HEART OF ALL WE DO.

Members of the SingHealth Group



Shoe String Project

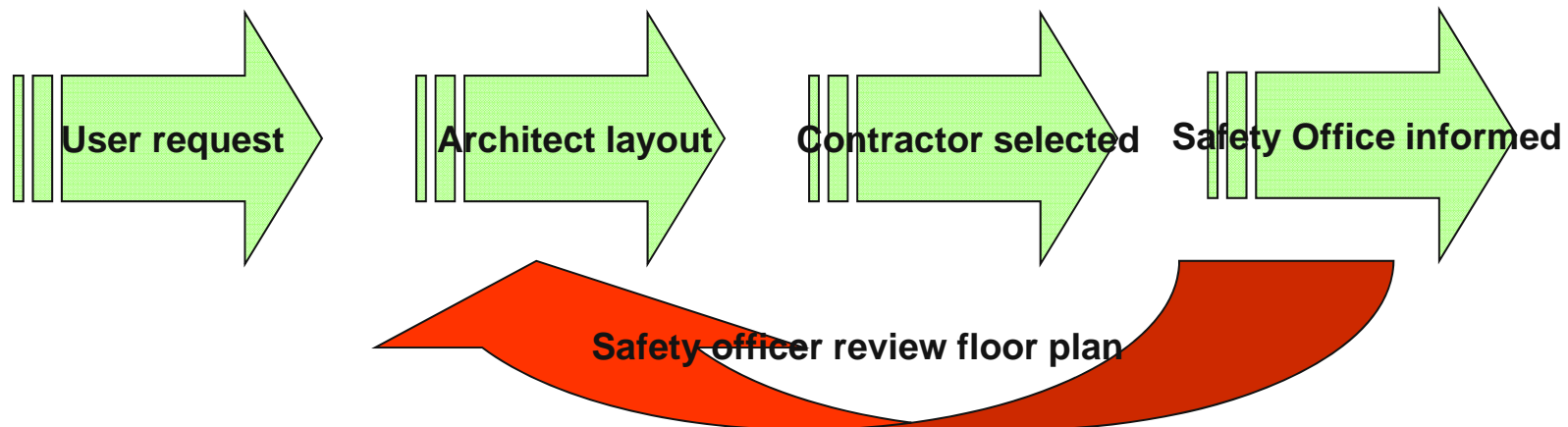
As lessons learnt from SARS and H1N1, SGH carried out a risk assessment exercise on how best we can control the spreading of infectious diseases. A 51-bed isolation ward (for adult) was created to house any contagious patient. What about babies born of mothers who may be one of the contagious patients? In view of the operational readiness, 2 rooms in Neonatology Intensive Care Unit were converted into Neonatology Isolation Rooms. Office of Safety Network (Hospital's Safety Department) was involved in the design, construction, testing and commissioning of the rooms. This is a case study of how we applied the principles and practices of containment lab (CL3) to provide a safer working environment for the staff and visitors.

Shoe String Project

With a shoe-string budget and physical constraint of the location, the project and safety team managed to deliver a functional isolation facility.

A containment facility requires

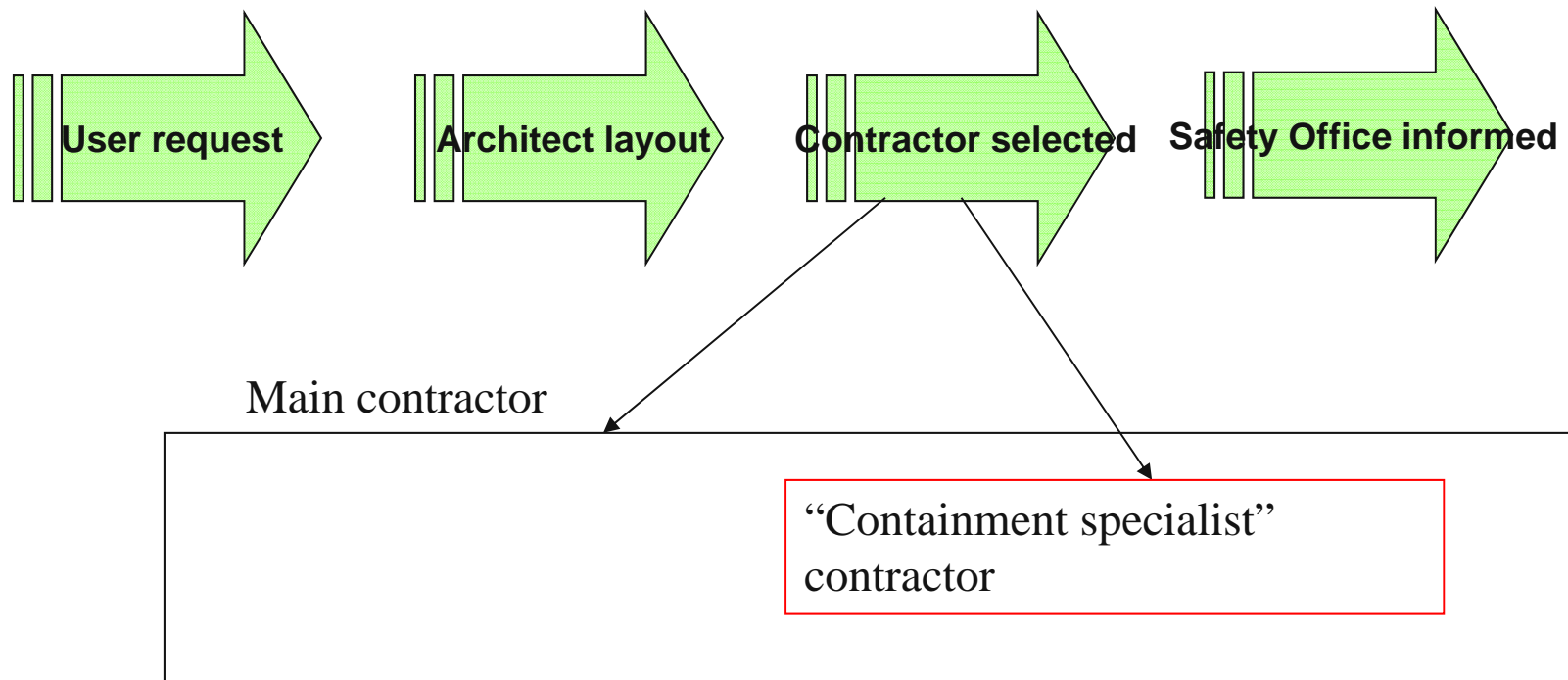
- –ve pressure to contain the “dirty” work.
- Requires directional air flow



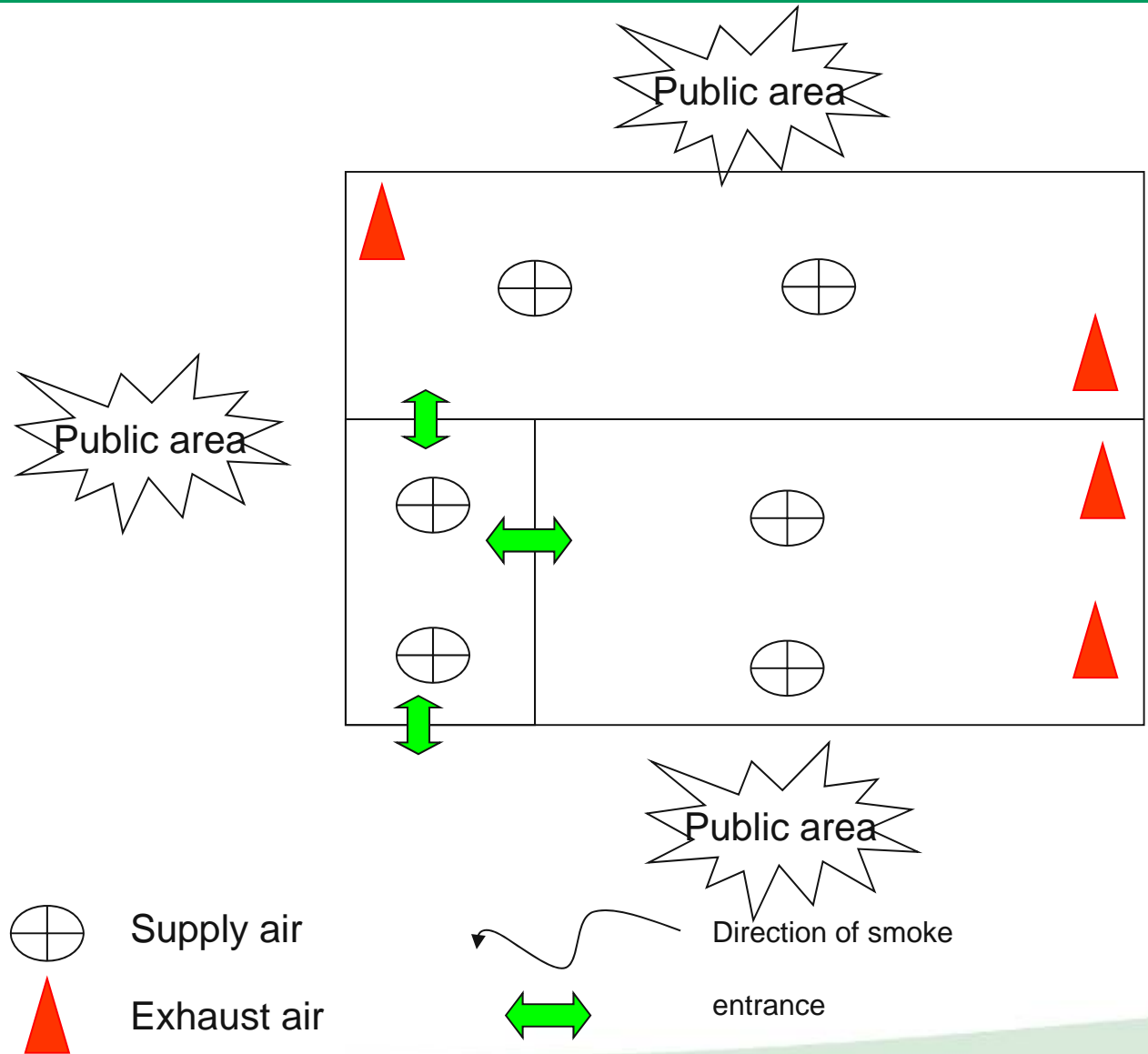
Case Study

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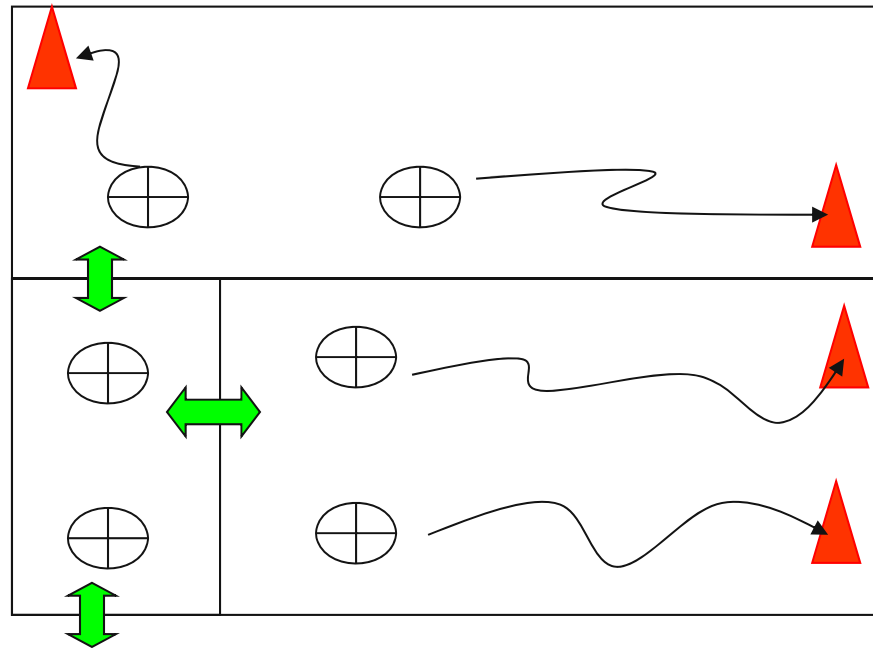


Case Study



Case Study

Containment means keep everything inside.



Rearrange of the supply and exhaust (to the best)

Containment means keep everything inside.
Contractor was not able to bring the room pressure to more than -10pa and was unable to explain why?

Safety team visited the site and found...

Containment means keep everything inside.

- Wall was found to be “holely”
- Huge door gap
- Penetration point every where
- Unable to decon the HEPA filter 😞

Case Study

Containment means keep everything inside.
Contractor was asked to seal the holes...

Room pressure: -14Pa

Contractor's comment was ...

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Contractor was asked to seal the holes...

Room pressure: -14Pa

Contractor's comment was ...

“I knew I need to close the gaps and patch the holes but I
could not tell the main contract what to do”

Safety team's reply



Oh sure!!!

HEPA Housing was rearranged to facilitate decon



Oh sure!!!

Thank you

< single image >
4.3cm x 5.5cm

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