

UDDT - sanitation in relation to Air Pollution and Hygiene within protected operating theaters in small rural hospitals?

Posted by AquaVerde - 07 Jan 2013 10:29

Dear Colleagues,

In windy very dry climatic areas it might be already a challenge to keep the **operating theaters** of a small hospital some how up to a standard, in regard to possible air pollution and general **hygiene standards**

. I guess even more difficult, if the dusty village still have some areas with open defecation...

Do have anybody **practical guidelines** (manuals) as open web-link or personal experiences for **rural hospitals**

on important issues involved? Maybe the Urine-diverting Dry Toilets or general all Toilets, composting areas or general dumping areas, incinerators and grey-water treatment / -use, have to have minimum distances to operating theaters of hospitals or do extra care against fly s and dust?

Thanks in advance.

Regards,

Detlef SCHWAGER

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Re: UDDT - sanitation in relation to Air Pollution and Hygiene within protected operating theaters in small rural hospitals?

Posted by AquaVerde - 24 Jan 2013 15:52

Dear Colleagues,

I received via E-Mail from **Toby Gould**, Technical Support Services Manager, of **RedR**, London, www.redr.org.uk (people and skills for disaster relief),

Technical Support Service: (Free for all humanitarian workers, for details see our website or contact

This e-mail address is being protected from spambots. You need JavaScript enabled to view it

),

a valuable answer: *copy & paste to susana with Toby`s permission*

Subject: TSS Enquiry

Dear Detlef,

A couple of responses for your query:

Hi,

This is not really my field, but here are some reflections.

It's unlikely in the short term that you'll be able to have significant impact on the amount of scattered faeces in the surrounding area, and in any case the operating theatre should be protected from airborne contamination, whatever its source (local environmental contamination, infection risk from inside the health-care facility), so the starting point should perhaps be the control of airflow in the operating theatre

- creating a positive air pressure by introducing clean air so as to prevent contaminated air from entering. Easier said than done, I know, but that's the general recommendation. Air-conditioning (at least 15 air changes per hour, with appropriate filters frequently maintained /

changed) could be a solution if local conditions and resources allow.

A second line of defence would be to see if it's possible to establish a perimeter fence or wall around the health facility so that at least the immediate surroundings of the facility can be kept clear of excreta.

Planting evergreen bushes and trees around would be a way to reduce transport of airborne particles in the longer term. You could try semi-permeable fencing in the short term.

As for the dirty dust, in the medium term, any toilets that get the excreta into the ground are good, simple pit latrines or VIPs will do the job. You may still need to deal with other excreta (chickens, goats etc.) and other sources of air-borne contamination such as household refuse.

here are three references you may find useful:

www.who.int/water_sanitation_health/emergencies/controls/en/index.html

www.who.int/water_sanitation_health/hygiene_health/en/index.html

(this one available in english and french) www.who.int/water_sanitation_health/publications/ventilation/en/

Good luck,

I have no experience of the design of the medical facilities, but there has been a lot of development work on incinerators for small medical facilities that can be accessed here: www.mw-incinerator.info/en/101_welcome.html

The de **Montfort incinerator** is considered very good for small to medium sized health facilities and Jim Pickens, who designed it at de Montfort University would be willing to answer questions if necessary.

Toby

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