

Designing a nation infectious disease hospital and High Level Isolation Unit HLIU

The building of National Centre for Infectious Diseases NCID is scheduled to hand over to users in June 2018. This marks the beginning of a new building to support national outbreak response. It will continue the legacy of Communicable Disease Centre CDC in outbreak response. The arrival of a novel pathogen – the Nipah virus in 1999 had shaken up the entire concept of outbreak readiness and response in local scene. The SARS in 2003 was an evident piece of a national response against a major invasion of novel pathogen. To put simply a well quoted verse “attack of an emerging infection is not IF but When”.

NCID is a fourteen story building that houses clinical wards with 330 beds, public health laboratory including a BSL3 laboratory, research laboratory, public health offices and training spaces. The building is designed with capability to progressively lock-down service areas in response to different pathogen and scale of the outbreak. The state-of-the-art facility worth mention is the High Level Isolation Unit, HLIU. The unit houses 4 beds with careful design of material and personnel movement to avoid cross contamination. Contaminated materials are autoclaved within the unit before disposal. On-site satellite laboratory to support routine tests such as blood counts, electrolytes, liver function tests, blood gas, etc. Trained personnel will be provided with top level personal protective gears when caring for patients. This unit is designed to care for patients with high virulent and high transmissible pathogen such as Ebola.