Multi Drug Resistant Organisms (MDROs) infections are becoming one of the most serious adverse events that occur in hospital settings, with many impacts and consequences such as worsening the patient morbidity and mortality, increased cost of managing individual patients, increased side effects by exposure to tough antibiotics, increased infection risks due to the need of invasive procedures, etc. The most unwanted nightmares of a hospital setting is to deal with an outbreak caused by MDROs such as an outbreak by a pan resistant *Acinetobacter Baumannii*. The rapid spread and highly infective bacteria put a huge burden on the infection prevention and control team in order to contain the outbreak and prevent its recurrence. The challenges of controlling such an outbreak remain in: Identifying the presence of an outbreak; identifying the cases, knowing the host of the outbreak, know the causative agent, isolating or cohorting patients, screening patients at risk, dedicating nursing care team to infected patients, monitoring hand hygiene and PPE and isolation compliance, getting all environmental cultures done and results, insuring the environment cleanliness and disinfection, choosing the right antibiotherapy regimen, getting enough financial resources to do all the above. Once the outbreak is controlled some measures have to be implemented and maintained to prevent a reemerging of other outbreaks such as training of all the staff (medical, nursing, technicians, administrative and environmental services) to hand washing technique, donning and doffing personal protective equipments, and standard and isolation precautions doing active surveillance of high risk patients: getting swab sampling every 72 hours for intubated and ventilated patients doing environmental cleanliness monitoring by ATP or other measurable mean, isolate patients as soon as they are colonized by the MDRO, doing deep clean and terminal disinfection of the unit frequently and doing deep clean and terminal disinfection after every infected patient leave.