EVD Virus Disease Preparedness and Readiness Assessment Mission, Pakistan, 24-28 November 2014

Major domain for preparedness	Critical Gaps	Recommendations
1. Coordination structures & mechanisms	 A national Ebola high level steering committee has been constituted but without detailed TOR. The translation of responsibilities at provincial level varied. The documentation of all SOPs measures at national and provincial level into a comprehensive plan is in process 	 The steering committee at national/provincial levels to be more inclusive and should have detailed terms of reference Polio Control Center could be used as a crisis cell. Response readiness detailed SOPs should be developed and simulation conducted.
2. Points of Entry	 WHO guidelines on screening measures are not being fully implemented especially at immigration counters. Airport Emergency Contingency Plans do not include a public health component. The Designated isolation area is available in Karachi but lacking in Islamabad and inadequate in Lahore. Human resources, EVD designated ambulance/s, PPE including donning and doffing training, IPC, and waste management assets, capacities and trainings (including that for cleaning staff) in-adequate or lacking 	 Integrate a public health emergency plan/ including EVD within existing Airport Contingency Plan. Establish the airport's committees involving highest level leadership of all stakeholders Establish standard isolation areas at Islamabad and Lahore airports while Karachi airport should get a pre-fab container Training for all stakeholders should be conducted at the airport on public health, IPC measures, and waste disposal. EVD designated and adequately equipped ambulances be made available at three airports
3. Surveillance & contact tracing	 A single integrated disease surveillance system does not exist at national level. Disease Early Warning system (DEWS) supported by WHO, is the routine surveillance program, flanked by other vertical programs A cohort of over 200 experts trained under the Field Applied Epidemiology Training Program is available at national and provincial levels but they are not being adequately utilized. Case definition/management, and contact tracing training and assets for EVD lacking. Rapid Response Team (RRT) for EVD is established only at Islamabad level. 	 Integration of EVD surveillance into existing surveillance system of Dengue is advised. It is essential to accelerate the proper handover of DEWS from WHO to provincial and federal level Finalize list of reportable diseases and SOPS and push for integration of reporting from key private institutions and other providers to be added to the reporting sites of the existing surveillance. Coordination amongst different surveillance systems should be improved. The establishment of well trained and equipped rapid response teams at federal and provincial levels able to do contact tracing is recommended.

4. Infection prevention & control	 Training of Trainers for the Health Workforce on using PPEs has been initiated; however, it remains limited and did not extended to other health care providers Standard IPC precautions are not followed by health workforce. The identified isolation facilities are inadequate. Limited IPC materials are available in designated hospitals and in airports isolation areas. Health care waste management capacities are lacking. There is a visible shortage of PPEs at national and provincial levels. The available selected Ambulances are not well Equipped and the staff has not been trained 	 Review the national IPC guidelines and include include EVD. Expediting the procurement of PPEs and other IPC Materials Ensuring effective training on IPC measures to all health workforce in designated areas Trainings to include tertiary care facilities as a priority. Implementation of Health care Waste management guidelines and practices in the designated EVD treatment facilities and airports should receive urgent Activation of the IPC committees in health care facilities The isolation facilities have to be equipped and well trained health workforce must be made available on an on-call basis. Equipped Ambulances with trained staff should be designated for referral of suspected cases in all provinces.
5. Laboratory services	 Trained staff and all equipment are available only at NIH. The designated hospital laboratories are not trained on bio-risk management and specimen collection from suspected case of EVD virus disease. IATA certified Shipper is available at federal level only The Virology laboratory is not involved in EVD related planning meetings. 	 At present specimen collected from suspected EVD cases should be packed and shipped according to IATA regulations to WHO Collaborating Centre. Temporary laboratory facility for clinical tests (hematological, chemistry, Malaria etc.) should be arranged in isolation ward with restricted access to trained staff for on-site testing. The Virology Department staff should be actively engaged in all EVD preparedness and readiness meetings
6. Risk communication	 Stakeholders recognize the importance, however, limited work has been done on risk communication in material development and dissemination is limited. Media interest is high; however, media engagement is ad hoc and is not structured. Capacity of the health care workers on risk communication is limited. 	 Risk communication should be coordinated to develop material, design campaigns and monitor implementation. Context sensitive risk communication material should immediately be produced and made available at all levels. Media engagement should be proactive and not reactive. Government should notify official spokesperson for EVD. Media statements should be periodic, consistent and well prepared. Health reporters should be oriented on EVD, risk assessments periodically.