4. DISEASE NOTIFICATION

4.1 Case Reporting and Epidemiological categorization

For the purpose of epidemiological disease notification, the prompt diagnosis and reporting of all the dengue cases is essential.

In areas of the world where dengue disease is endemic, all the cases of PUO, presenting with nonspecific features, would have DF included in the list of differential diagnosis. The category of "**SUSPECTED DENGUE"** as defined by GCP guidelines will be inclusive of all such cases (**Appendix 5**). The diagnostic yield in non-epidemic situation, within this cohort, is often very small. (All the viral illnesses, malaria, typhoid and PUOs would muddy up the data).

In our clinical practice, all the "suspected cases" have to have a CBC done. If Patient has WBC count of less than 3000 and platelet count of less than 100,000, patient would be categorized as **"PROBABLE DENGUE"**. Case reporting is then, mandatory. (**Section 5.1 & DEAG "Form R", Appendix 4a**)

Confirmatory tests in these patients in the form of viral isolation (PCR), documentation of NS1, or four fold increases in the immunoglobulin titer on paired sample taken 5 days apart would clinch the diagnosis as **"CONFIRMED DENGUE"** – albeit too late for epidemiological purpose. (**Section 5.2 & Appendix 5**) Filing of a detailed case report form (**Appendix 4b**) is mandatory here.

Dengue fever diagnosis is divided into three categories **for epidemiological purposes** (This is not a clinical staging)

- Suspected dengue:
- Probable dengue:
- Confirmed Dengue: (See **Appendix 5** for detailed description)

All Probable dengue cases, admitted to the hospital or under the care of a GP, must be notified to the EDO health who in turn will report to DG health **within one hour** – it is to be followed by written notification within 24 hours using the standard notification format (**Ref to DEAG "Form R" on Appendix 4a**). Absence of disease notification system or delay, if there was indeed a system, was the major cause of the dengue epidemic in Lahore in 2011.

In the state of epidemic, notification should be done as soon as a clinical diagnosis of dengue is suspected; hematological/serological confirmation is not necessary. The DG health would appoint officers to visit the notifying doctor to get the particulars of the patient for the verification of case and initiation of preventive measures**. It is also important to note that re-notification has to be done if the diagnosis is reversed from DHF/ DF to other diagnosis.**

Failure to notify dengue is liable to be compounded under the Punjab prevention and control of Dengue (temporary) regulations 2011 - NO.S.O. (PH) 9-98/2002 (P-1)[43] **(Appendix 6)**

This reporting protocol is similar to the one being followed in Malaysia[44]