

Table S1. Evidence table for citations fulfilling the inclusion and exclusion criteria for the literature review (n=34).

| Citation | Region/geographical area | Study design | Data period: Date range/year | If study: | | Summary of data presentation or results/conclusion |
|--------------------------|--------------------------|---|------------------------------|--|-----------|--|
| | | | | Patients/ population studied (n) [m/f] | Age range | |
| Ooi et al., 2008 (3) | Nationwide data | Review of surveillance systems | 2000–2005 | | | Includes incidence of dengue fever/dengue hemorrhagic fever in South-East Asian countries from 2000 to 2005 (WHO DengueNet) and a subjective evaluation of the status and efficiency of the surveillance systems. |
| DOH, 2005–2010 (5) | Nationwide data | DoH report | 1980–2001, 2004 | | | Presentation of Philippine Health Statistics showing trends in dengue morbidity and case-fatality (1980–2001 and 2004) highlighting the cyclical nature of the disease. |
| WHO, 2008 (6) | Nationwide data | WHO report | 1991–2004 | | | Information from the WHO South-East Asia and Western Pacific regions providing a single source of information on public health issues across the Asia Pacific Region. In a review of the epidemiology of dengue in the Region, the book provides data on the number of reported dengue cases and case-fatality rates in Philippines. |
| Beatty et al., 2010 (13) | Nationwide data | Working party assessment of dengue surveillance in 22 countries | 2005 and 2006 | | | Two Dengue Prevention Boards convened by Pediatric Dengue Vaccine Initiative to discuss dengue surveillance in 22 countries. Philippines' surveillance data presented for 2005/6. Assesses strengths and weaknesses of surveillance for the countries represented and suggested best practice in endemic countries. |
| Lee Suy, 2008 (16) | Nationwide data | WHO report | 1993–2007 | | | The number of cases has been increased to a total of over 55 000 cases in 2007. The case-fatality rate has been maintained at approximately 1% (the CFR in 2007 was 0.9%). Children between 1 and 10 years old are most affected by dengue infection, and infection is essentially equal between males and females. All serotypes of the disease are transmitted in the Philippines. |
| WHO, 2009 (20) | Nationwide data | WHO report | 2006 and 2008 | | | A profile of health in WPRO countries. In 2006, dengue was the tenth leading cause of in-patient morbidity in the Philippines. Report suggests a resurgence in the number of dengue cases early in 2008. |

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| WHO, 2012 (21) | Nationwide data | WHO report | 2005–2007 | | | Data on current climate-sensitive disease burdens. Reported dengue cases by month and by morbidity week. |
| DOH, 2000–2005 (25) | Nationwide data, all regions | Department of Health National and Regional Health Statistics | 2000–2005 | Total population of the country | All | Data tables |
| DOH, 2011 (26) | Nationwide data | DOH report | 1991–2005 | | | Data tables: leading causes of morbidity in the Philippines. |
| DOH, 2011 (27) | Nationwide data | DOH report | 2001–2006 | | | Data tables presenting leading causes of child mortality. |
| DOH, 2011 (28) | NCR, CAR, Regions 1-12, CARAGA, ARMM, Foreign | DOH report | 2001–2006 | | | Data tables: selected causes of morbidity in the Philippines, by region. |
| FHSIS, 2000–2009 (29) | Nationwide data | DOH report | 2001–2009 | 6614 [3560:3054] | <1 – ≥65 years | The Field Health Services Information System (FHSIS) provides the Department of Health (DOH) with health-services data to monitor activities on a routine basis (monthly, quarterly or annually) from the Barangay Health Stations, municipality, province, cities and regions. |
| WHO, 2010 (30) | Nationwide data | WHO surveillance report | 1 January 2010 – 18 December 2010 | | | Regular dengue situation updates made available by the WHO WPRO based on officially reported national surveillance data. |
| WHO, 2011 (31) | Nationwide data | WHO emerging disease surveillance and response | January 2011 – December 2011 | | | Regular dengue situation updates made available by the WHO WPRO based on officially reported national surveillance data. |
| WHO, 2012 (32) | Nationwide data | WHO surveillance report | 2009 | | | In 2009, there were 242,424 dengue cases and 785 dengue deaths were reported in 25 out of 37 countries and territories in the WPRO region: Philippines (57,819 cases, 548 deaths). |
| Arima et al., 2011 (33) | Nationwide data | WHO summary of Official dengue surveillance data: Suspected or probable dengue cases were reported through the Philippines Integrated Disease Surveillance and Response System | 2006–2010 | 172,288 cases [52.3:47.7] | | Dengue surveillance data for 2010 reported a total of 135355 dengue cases, of which 793 were fatal, with a peak (n = 30 009) during the month of August. While all four serotypes circulated, the predominant serotype identified was DENV-3. |

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| NSCB, 2001–2008 (34) | Nationwide data | National Statistical Coordination Board (NSCB) data | 2001–2008 | | | Notifiable diseases reported cases by cause 2001–2008 (data reported only reflect cases seen in government health centers, and thus are under-reported). |
| Contreras et al., 2011 (35) | Quezon City hospital | Observational study: description of DHF patients admitted to the Paediatric Intensive Care Unit (PICU) | January 2005 – December 2009 | 129 patients [1:1] | Mean age 8.8 years \pm 3.4 years | 2006 had the highest DHF PICU admissions (41.86%), the lowest in 2005 (4.65%); 60% were in the 6–11 years-old age group; male to female ratio was 1:1. Majority of cases were from Quezon City (37%), Rizal (23%), Metro Manila (9%), Bulacan (5%), Antipolo (4%) and Caloocan (3%). |
| DOH, 2011 (36) | Nationwide data, split by 17 regions | DOH surveillance report | 2010 and 2011 | | | Disease Surveillance Report: 70,204 dengue cases reported by nationwide disease reporting units from January 1 to September 10, 2011. Most of the cases were from: National Capital Region (21.97%), Region III (19.01%), Region IV-A (14.55%). |
| Edillo et al., 2008 (37) | Rural Guba, Cebu City | Surveillance study: analysis of dengue cases and deaths recorded at sentinel hospitals of the DOH Regional Epidemiological Surveillance Unit, and pupal survey | 1997–2008 | 33771 | | 17,675 dengue cases and 442 deaths were reported in the municipalities or cities of Cebu Province (2002–2007). Cebu City had the highest reported dengue cases throughout this period (range per year = 605–1,670 cases and 8–57 deaths). Both genders were almost equally represented. |
| Edillo et al., 2009 (38) | Cebu | Surveillance study: analysis of all dengue cases recorded at different Regional and Surveillance Unit sentinel hospitals of the Department of Health, Central Visayas (Region 7) | 2002–2007 | 17675 | | Year-to-year differences of dengue cases, deaths and case–fatality rates (CFR=1.19–3.73%) were significant. Dengue cases and deaths increased in the rainy season. Children age 1–5 years (31.7%) followed by those age 6–10 years (30.59%) were the most affected. |
| NDRRMC Update, 2011 (39) | Calabarzon region: Provinces of Cavite, Laguna, Batangas, Rizal and Quezon | Summary report of Regional Disaster Risk Reduction and Management Council (RDRRMC) IV-A conducted a meeting to assess the current dengue situation in Calabarzon | January – August 2011 | | | From January to the first week of August 2011, there were 6,778 cases of dengue with 33 deaths recorded in the Provinces of Cavite, Laguna, Batangas, Rizal and Quezon. Dengue cases concentrated and clustered in identified breeding places of dengue-carrying mosquitoes such as junk shops, vulcanizing shops, tyre collections, etc. |

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| Su et al., 2008 (40) | Metro Manila (also called National Capital Region):16 surrounding cities and municipalities | Retrospective study using National Epidemiology Sentinel Surveillance System incidence data and climatic data from the Philippine Atmospheric, Geophysical and Astronomical Services (PAGASA, Quezon City). | 1996–2005 | | | Dengue incidence in Metro Manila was influenced by changing rainfall patterns. Temperature was not significantly related to dengue incidence. This study suggests that surveillance and control of mosquitoes must be intensified during periods of high rainfall. |
| DOH, 1999–2011 (41) | Nationwide data | Research conducted at NEC Library of the DOH | 1999–2011 | | | Research conducted at: NEC Library of the DOH (formerly FETP Library), Philippines. Data analyses provided between 28 May and 20 July 2012. |
| Lim et al., 2010 (42) | Muntinlupa | Retrospective, descriptive study: assessment of clinico-demographic profile of paediatric patients admitted for dengue at the Research Institute for Tropical Medicine (RITM) | 2000–2004 | 200 qualified for the study [1:1] | Eligible: <19 years. Mean age±SD: 10±4 years. Range: 4 months–18 years. Majority (64%) 6–12 years | 51% of the patients had grade II DHF; 49% had acute secondary dengue infection; 32% had recent secondary dengue infection; only 13% had acute primary dengue infection. There was no significant relationship between the severity of dengue infection (WHO Grade) and primary or secondary infection status (r = 0.018, p value = 0.025). |
| Ypil-Butac et al., 2011 (43) | San Lazaro Hospital (a tertiary infectious disease referral hospital) in Manila | Sero-epidemiologic profiling of patients admitted with dengue-like illness. Outcomes reported: clinical presentation; disease severity; primary vs secondary infections; age range | 1 September 2005 – 17 January 2006 | 275 screened; 104 enrolled; 90 (87%) confirmed dengue [62%:38%] | Mean age, 18 years | 6 (7%) primary and 84 (93%) secondary dengue virus infections; 40 (38%) female, 64 (62%) male; mean age 18 years (50% of cases between 13–20 years), only 3% were <7 years and 1 % >35 years. All four serotypes were identified; DENV-3 was predominant. |
| Capeding et al., 2010 (44) | San Pablo, Laguna, a semi-urban community south of metro Manila | Fever surveillance in a prospective cohort study. Outcomes reported: Dengue incidence, disease severity, primary vs secondary infection, and dengue serotype (RT-PCR) | January 2007 – May 2009 | 4441 infants | Healthy infants aged 6-18 weeks at enrollment | Age-specific incidence of symptomatic DENV infection: 0.7–2.8/1,000 (2–15 months; mode 8 months). Age-specific incidence (3–8 months) of infant DHF: 0.5/1,000; no DHF cases in infants ≥ 9 months. Incidence rate of unapparent infant infections 103/1,000 person-years: a 6-fold higher rate than symptomatic infant DENV infections. |

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| Bomasang et al., 2008 (45) | Cardinal Santos Medical Center, Greenhills, San Juan | Prospective cohort study 10-month, prospective cohort study conducted in a tertiary referral hospital (Cardinal Santos Medical Center) | November 2006 – August 2007 | 42 adults clinically suspected to have dengue infection based on the WHO criteria [18:24] | ≥18 years | 90% of clinically suspected dengue cases confirmed by serologic and virologic examinations. Predominant serotypes were DENV-2 and -3; a trend towards a more severe dengue infection with these serotypes. |
| Libraty et al., 2009 (46) | San Pablo, Laguna, Philippines | A prospective nested case-control study of DENV infections during infancy to measure associations between maternally derived anti-DENV3 antibody-neutralizing and -enhancing capacities at the time of DENV3 infection and development of infant DHF | January 2007 – January 2008 | 4441 infants [2276:2165] | 2.2 months (0.8–5.6 months) | The study captured 60 infants with DENV infections across a wide spectrum of disease severity. DENV-3 was the predominant serotype among the infants with symptomatic (35/40) and unapparent (15/20) DENV infections, and 59/60 infants had a primary DENV infection. |
| Carlos et al., 2005 (47) | St. Luke's Medical Center in Quezon City | Prospective study to determine differences in the clinical features and hematologic abnormalities between DF and DHF. Outcomes reported: disease severity, clinical features, hematologic abnormalities, dengue serotype (RT-PCR) | January 1999 and December 2001 | 503 subjects screened: 359 patients with dengue (1.49:1) | 2–17 years | Of the 503 subjects screened, 359 were confirmed as having a dengue-virus infection: one third was diagnosed with DHF. Coagulation abnormalities associated with most DHF patients were thrombocytopenia and increased fibrinolysis. |
| Oishi et al., 2006 (48) | St. Luke's Medical Center (SLMC), Quezon City, Metro Manila, Philippines | Prospective study to define the clinical and hematological differences between DF/DHF and other febrile illnesses | January 1999 – December 2001 | 503 hospitalized pediatric patients with acute febrile illness, of which 359 (71.4%) were diagnosed DF/DFH. [1.5:1] | Eligible: 2-17 years. Mean±SD age was 9.9±4.2 years for the 239 DF patients and 9.8±3.7 years for the 120 DHF patients | 359 cases (71.4%) were diagnosed with a dengue-virus infection. Most of the cases with dengue virus infection were associated with DENV-1 and DENV-2. One third of the patients with dengue virus infections had DHF, most without shock. A low incidence of dengue shock syndrome and a low fatality rate among pediatric patients with dengue virus infection was found. |

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| Alera et al., 2009 (49) | Cebu City | Cross-sectional, tertiary, hospital-based passive surveillance study | January – December 2008 | 176 enrolled; virologically confirmed 154 [1.2:1] | Overall: 2–32 years; majority (96%) <15 years | Acute secondary infections: 144 (94%); acute primary infections: 6 (4%). Clinical diagnosis of laboratory confirmed dengue cases: 69 (45%) DHF Group 2, 43 (28%) DHF Group 1, 33 (21%) DSS (DHF Group 3/4), 5 (3%) DF, and 4 (3%) systemic viral infection. Circulating serotypes: DENV-1: 10 (12%); DENV-2: 9 (11%); DENV-3: 65 (76%); DENV-4: 1 (1%).. |
| Salda et al., 2005 (50) | Nationwide | Molecular epidemiology study: determination of DENV-2 genetic variants circulating locally and identification of possible associations with severity of clinical presentation. Outcomes reported: phylogenetic analysis of dengue virus serotype 2 isolates | 1995 – 2002 | Samples consisted of 41 DENV-2 isolates from outbreaks and epidemics | | Phylogenetic analysis revealed two distinct circulating genotypes (Asian 2 and Cosmopolitan) with the potential to cause severe hemorrhagic disease. The Cosmopolitan genotype has gradually replaced Asian genotype 2 in the Philippines. Members of this genotype were closely related to viruses from Australia, Singapore and Thailand. |
| Destura et al., 2010 (51) | N/A | Gene sequence analysis of 14 Philippine DENV-3 isolates compared with 17 other geographically diverse DENV-3 isolates | 2008 – 2010 | N/A | | The study clearly revealed a different subtype compared with other reported sequences of DENV-3 viruses. The Philippine isolates did not fall into any of the groups of the reported genotypes suggesting the identification of a new genotype. |