

## Dengue

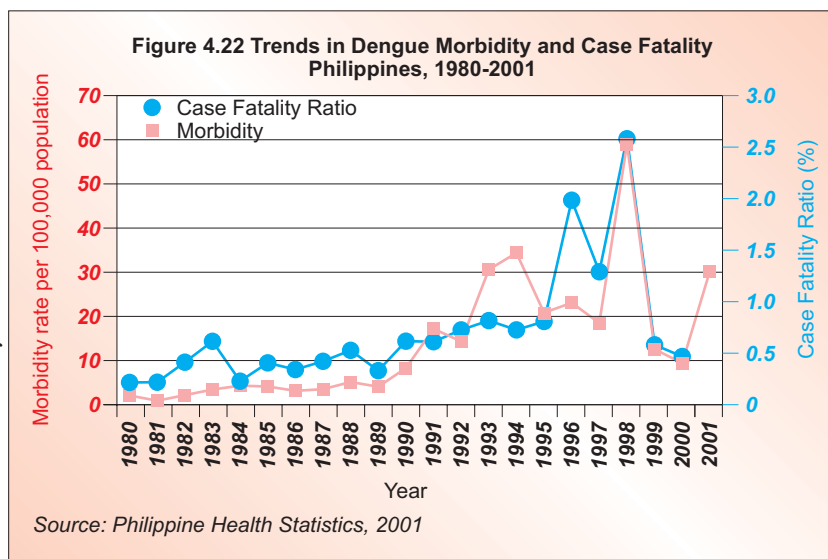
Dengue fever and the more severe form, dengue hemorrhagic fever, are caused by any one of the four serotypes of dengue virus. In the Philippines, the day-biting female *Aedes* mosquito transmits the viral disease to humans. The mosquito vectors breed in small collections of water such as storage tanks, cisterns, flower vases, and backyard litter. The disease affects all ages but most cases are among children 0-15 years old.

The morbidity rate of dengue fever in 2001 is much lower at 30 cases per 100,000 population compared to the highest ever recorded rate of 60.9 per 100,000 in 1998. The case fatality ratio for dengue fever and dengue hemorrhagic fever in 2000 is also lower at 0.5 percent compared to the highest recorded ratio of 2.6 percent in 1998. While there were 12 outbreaks of dengue fever in 1998, there was an average of one to three outbreaks a year during the period 1999-2004. The sudden increases in the incidence of dengue in 1993, 1998 and 2001 were

expected because of the cyclical nature of the disease --- the reason why dengue remains a threat to public health despite low incidences reported in recent years. Dengue cases usually peaks in the months of July to November and lowest during the months of February to April.

As for risk-reduction interventions, the number of households practicing

removal of mosquito breeding places increased to 70 percent in 2003 from 66 percent in 1998 (NDHS 2003). Mosquito vector control is the main strategy recommended by the DOH for the prevention of dengue. Seasonal but consistent mass media campaigns for the application of household control measures have increased the awareness of susceptible populations about dengue and have empowered communities, households and individuals to take precautions against it. Fogging with insecticide is not a recommended preventive and control measure and is very expensive as it ideally should be carried out every 3-7 days during the two to three months of peak transmission season. It is recommended only when there is an impending outbreak or epidemic.



Proactive dengue control campaigns and interventions to prevent epidemics, initiated in the past years by the DOH and local health offices with community support, have resulted in a dramatic fall in the number of dengue cases reported after the 1998 pandemic. However, no single best remedy can control the disease. There is yet no vaccine to prevent dengue, nor any specific drug regimen to cure it. Dengue control requires the combined effects of sound and timely environmental management, personal protection measures, early diagnosis, effective clinical management and logistics support to local health systems.

| <b>Goal: Morbidity and mortality from dengue infection are reduced.</b> |   |  |   |
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| <b>National Objectives for 2005 - 2010</b>                              |   |  |   |
| <b>Objective</b>  | <b>Indicator</b>  | <b>Target</b>                                      | <b>Baseline Data and Source</b>   |
| Morbidity from dengue infections is reduced                             | Incidence rate of dengue per 100,000 population                                 | Less than 10 cases per 100,000 population annually | 13 cases per 100,000 population<br><i>National Epidemiologic Sentinel Surveillance System, 2004</i> |
| Mortality from dengue fever and dengue hemorrhagic fever is reduced     | Percentage of deaths from dengue over the number of cases (case fatality ratio) | Less than one percent                              | 1.7 percent<br><i>National Epidemiologic Sentinel Surveillance System, 2004</i>                     |

| <b>Strategic Thrusts for 2005-2010</b>  |
|---|
| <ul style="list-style-type: none"> <li>Continue implementing <b>timely mass media and community-based information campaigns</b> on dengue control.</li> <li>Make available <b>early diagnosis and quality clinical care for dengue cases at all levels of care</b>. This is achieved by continuing the training of clinic-based and hospital-based health care providers and improving the case referral networks.</li> <li>Institute <b>risk-reduction interventions</b> such as <b>environmental sanitation</b> and <b>removal of mosquito breeding places</b>, specifically during the peak season for the disease.</li> </ul> |