

Malaria incidence: total reported cases

Just as mapping population density (Figure 4) gave different patterns to mapping of population numbers (Figure 3), so too mapping malaria incidence in terms of reported cases per 1,000 population (Figure 13: 1996. Figure 14: 1997; Figure 15: 1998) gives different disease patterns than mapping total numbers alone (Figures 7, 8, 9 respectively).

Some of the same general trends are apparent in the sense that there is a high incidence in Myanmar, Lao PDR, parts of Cambodia and Viet Nam, the western part of Thailand, while the incidence in the three Chinese provinces is relatively low. High incidence areas appear at, across or near to international border regions, but not exclusively so. Cross reference to Figure 4 demonstrates that malaria incidence is not proportional to population density, indeed many low population density unit areas have a high malarial incidence. This not surprising since malaria transmission is confounded by many variables e.g. forest cover, watershed characteristics, employment patterns, vector prevalence, etc. Of course the highest population clustering tends to be in urban areas where conditions favoring malaria transmission tend to be absent.

The relatively high or low concentrations of people and of malaria incidence have important implications both for transmission dynamics and for case management. Where there is a high incidence of disease and a low population density there may be a high demand for treatment, a high cost in providing facilities and often a poorly developed infrastructure. Many such areas are apparent throughout the region.

What this set of maps do highlight is the areas where inter-country collaboration might focus resources in relation to population density and transmission liability. Again, further detailed analysis at more micro levels of data analysis would provide a more accurate basis for such collaboration.

Again, too, it is important to re-emphasize that these are public sector data and give no measure of private sector activities. Since private health sector activity tends to cluster around or near urban areas rather than being widely distributed there is no reason to expect that mapping private management of malaria cases would mirror the public sector pattern. Self-treatment utilizes drug stores at many levels. These issues come more into focus when considering anti-malarial drug policy.

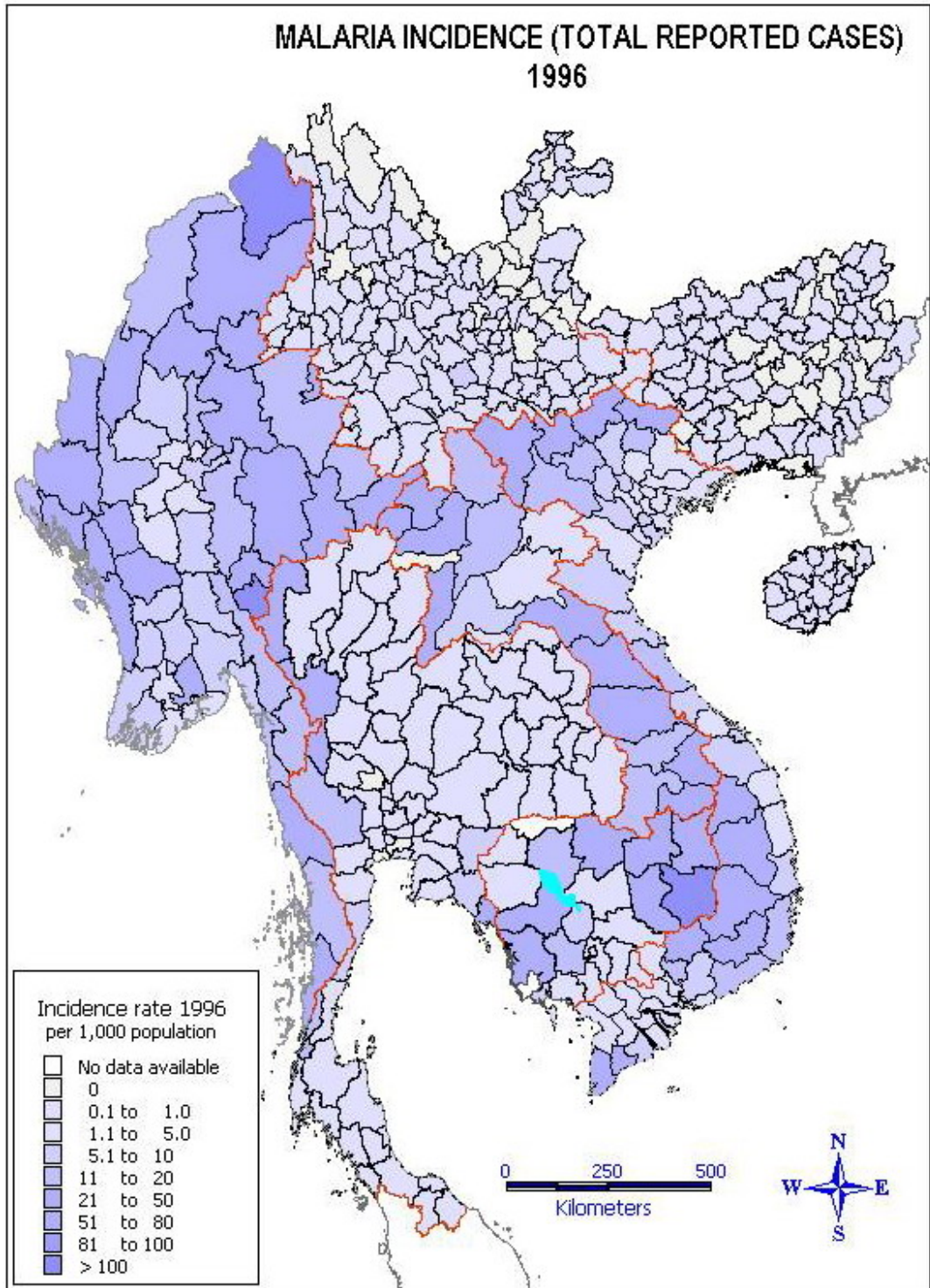


Figure 13.

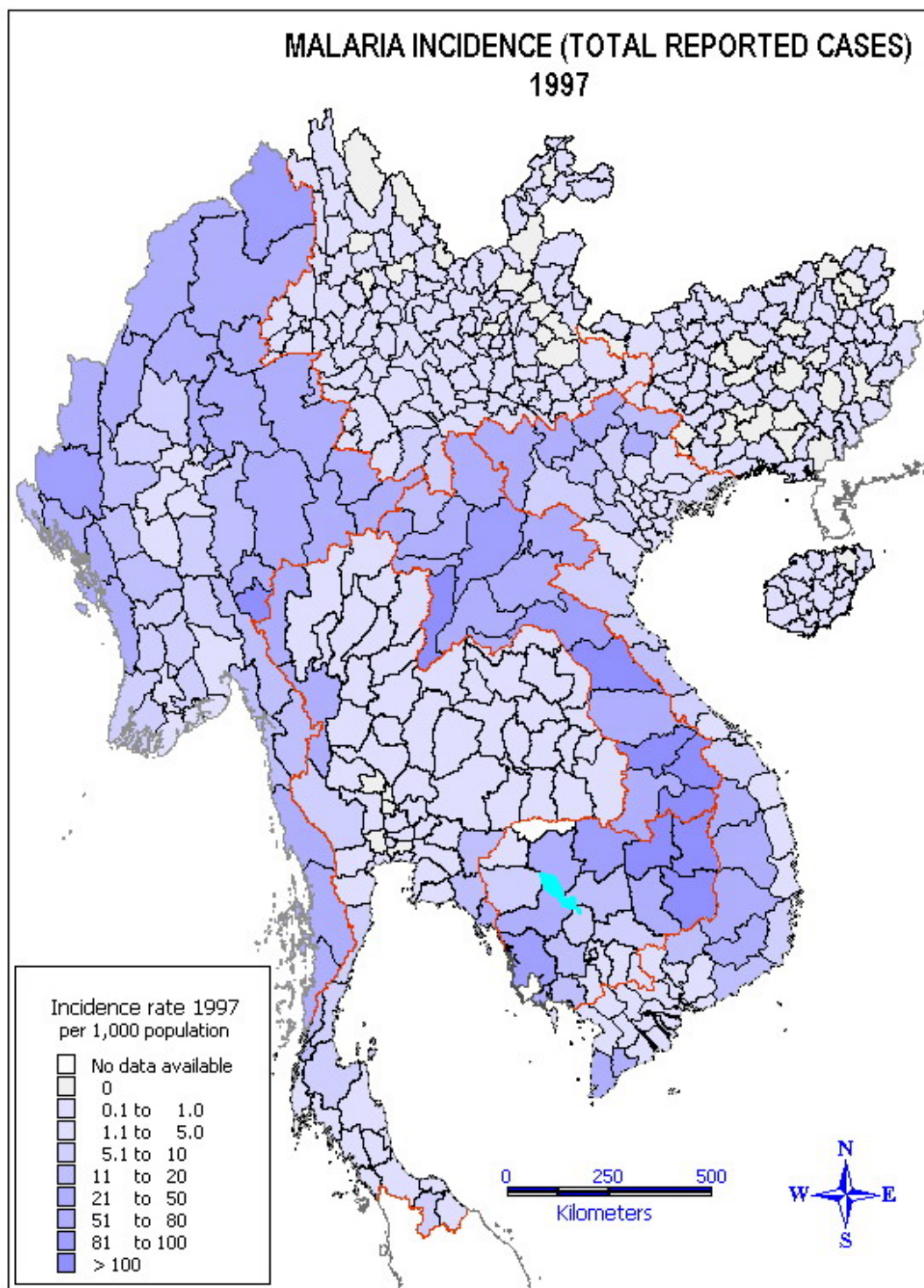


Figure 14.

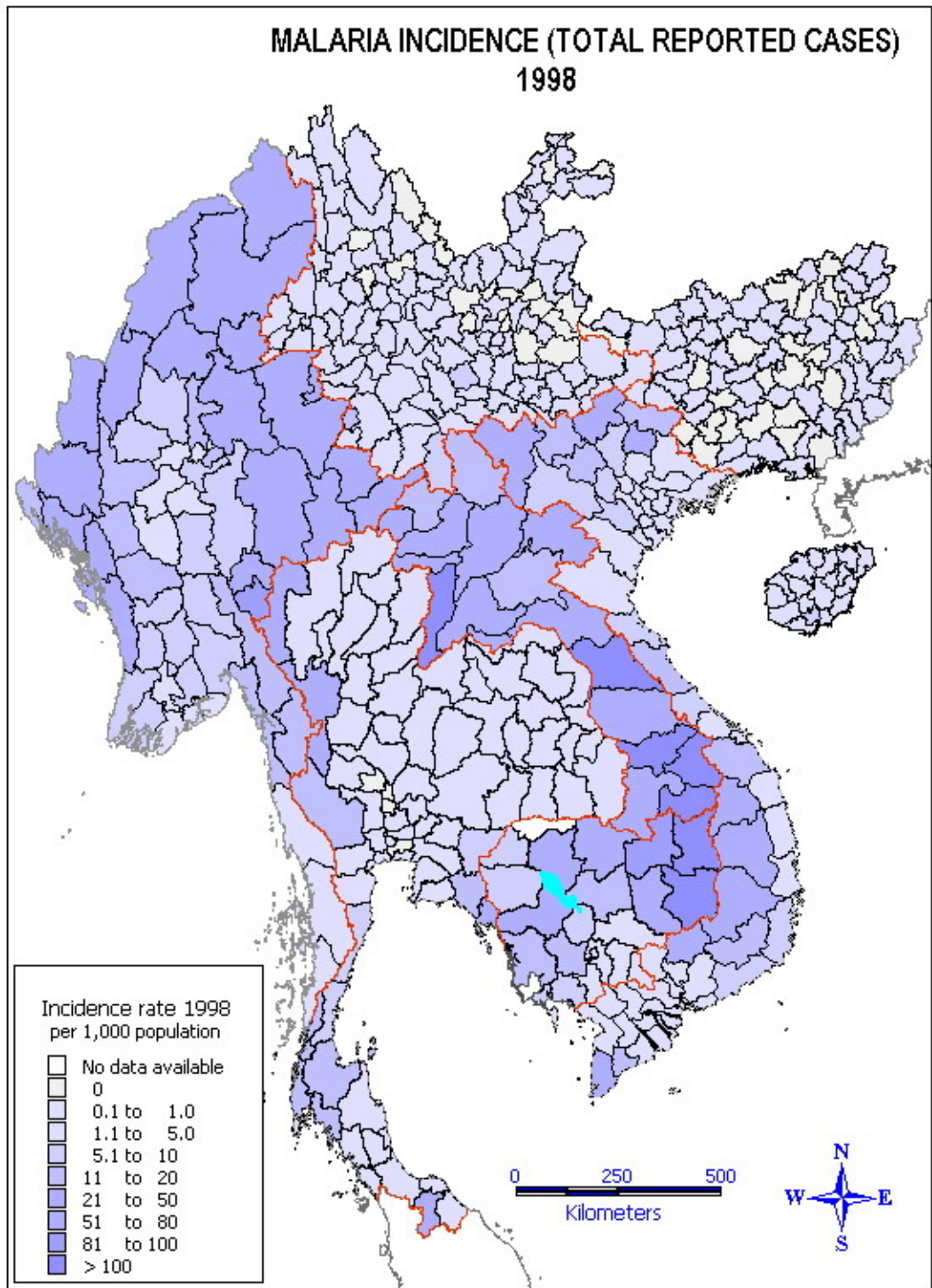


Figure 15.