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Division of Vector-Borne Infectious Diseases

Japanese Encephalitis

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Table: Risk of Japanese encephalitis by country, region, and season

Par Susan Hills, Randall J Nett, Marc Fischer, Yellow book 2012

| COUNTRY | AFFECTED AREAS | TRANSMISSION SEASON | COMMENTS |
|------------------------|---|---|--|
| Australia | Outer Torres Strait islands | December–May; all human cases reported February–April | 1 human case reported from north Queensland mainland |
| Bangladesh | Little data, probably widespread | Unknown; most human cases reported May–October | 1 outbreak of human disease reported from Tangail District in 1977; sentinel surveillance has recently identified human cases in Chittagong, Dhaka, Khulna, Rajshahi and Sylhet Divisions; highest incidence reported from Rajshahi Division |
| Bhutan | No data | No data | |
| Brunei | No data; presumed to be endemic countrywide | Unknown; presumed year-round transmission | |
| Burma (Myanmar) | Limited data; presumed to be endemic countrywide | Unknown; most human cases reported from May–October | Outbreaks of human disease documented in Shan State; antibodies documented in animals and humans in other areas |
| Cambodia | Presumed to be endemic countrywide | Year round with peaks reported May–October | Sentinel surveillance has identified human cases in at least 14 provinces, including Phnom Penh, Takeo, Kampong Cham, Battambang, Svay Rieng, and Siem Reap |
| China | Human cases reported from all provinces except Xizang (Tibet), Xinjiang, and Qinghai; not considered endemic in Hong Kong and Macau, but rare cases reported from the New Territories | Most human cases reported June–October | Highest rates reported from Chongqing, Guizhou, Shaanxi, Sichuan, and Yunnan provinces; vaccine not routinely recommended for travel limited to Beijing or other major cities |
| India | Human cases reported from all states except | Most human cases reported May–October, | Highest rates of human disease reported from the states of |

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|---------------------------------|---|--|--|
| | Dadra, Daman, Diu, Gujarat, Himachal Pradesh, Jammu, Kashmir, Lakshadweep, Meghalaya, Nagar Haveli, Punjab, Rajasthan, and Sikkim | especially in northern India; the season may be extended or year-round in some areas, especially in southern India | Andhra Pradesh, Assam, Bihar, Goa, Haryana, Karnataka, Kerala, Tamil Nadu, Uttar Pradesh, and West Bengal |
| Indonesia | Presumed to be endemic countrywide | Human cases reported year-round; peak season varies by island | Sentinel surveillance has identified human cases in Bali, Kalimantan, Java, Nusa Tenggara, Papua, and Sumatra |
| Japan² | Rare sporadic human cases on all islands except Hokkaido; enzootic activity ongoing | Most human cases reported July–October | Large number of human cases reported until JE vaccination program introduced in late 1960s; most recent small outbreak reported from Chugoku district in 2002; enzootic transmission without human cases observed on Hokkaido; vaccine not routinely recommended for travel limited to Tokyo or other major cities |
| Korea, North | No data | No data | |
| Korea, South² | Rare sporadic cases countrywide; enzootic activity ongoing | Most human cases reported May–October | Large number of human cases reported until routine JE vaccination program introduced in mid-1980s; highest rates of disease were reported from the southern provinces; last major outbreak reported in 1982; vaccine not routinely recommended for travel limited to Seoul or other major cities |
| Laos | Limited data; presumed to be endemic countrywide | Year round, with peak June–September | Sentinel surveillance has identified human cases in north, central, and southern Laos |
| Malaysia | Endemic in Sarawak; sporadic cases reported from all other states; occasional outbreaks reported | Year-round transmission; peak October–December in Sarawak | Most human cases from reported from Sarawak; vaccine not routinely recommended for travel limited to Kuala Lumpur or other major cities |
| Mongolia | Not considered endemic | | |
| Nepal | Endemic in southern lowlands (Terai); cases also reported from hill and mountain districts, including the Kathmandu valley | Most human cases reported June–October | Highest rates of human disease reported from western Terai districts, including Banke, Bardiya, Dang, and Kailali; vaccine not routinely recommended for those trekking in high-altitude areas or spending short periods in Kathmandu or Pokhara en route to such trekking routes |
| Pakistan | Limited data; human cases reported from around Karachi | Unknown | |
| Papua New Guinea | Limited data; probably widespread | Unknown | Sporadic human cases reported from Western Province; serologic evidence of disease from Gulf and Southern Highland Provinces; a case of JE was reported from near Port Moresby in 2004 |

| COUNTRY | AFFECTED AREAS | TRANSMISSION SEASON | COMMENTS |
|--------------------------------|---|---|--|
| Philippines | Limited data; presumed to be endemic on all islands | Unknown; probably year-round | Outbreaks reported in Nueva Ecija and Manila; sporadic human cases reported from other areas of Luzon and the Visayas |
| Russia | Rare human cases reported from the Far Eastern maritime areas south of Khabarovsk | Most human cases reported July–September | |
| Singapore | Rare sporadic human cases reported | Year-round transmission | Vaccine not routinely recommended |
| Sri Lanka | Endemic countrywide except in mountainous areas | Year-round with variable peaks based on monsoon rains | Highest rates of human disease reported from Anuradhapura, Gampaha, Kurunegala, Polonnaruwa, and Puttalam districts |
| Taiwan² | Rare sporadic human cases islandwide | Most human cases reported May–October | Large number of human cases reported until routine JE vaccination introduced in 1968; vaccine not routinely recommended for travel limited to Taipei or other major cities |
| Thailand | Endemic countrywide; seasonal epidemics in the northern provinces | Year-round with seasonal peaks May–October, especially in the north | Highest rates of human disease reported from the Chiang Mai Valley; sporadic human cases reported from Bangkok suburbs |
| Timor-Leste | Limited data; sporadic human cases reported | No data | |
| Vietnam | Endemic countrywide; seasonal epidemics in the northern provinces | Year-round with seasonal peaks May–October, especially in the north | Highest rates of disease in the northern provinces around Hanoi and northwestern and northeastern provinces bordering China |
| Western Pacific Islands | Outbreaks of human disease reported in Guam in 1947–1948 and Saipan in 1990 | Unknown; most human cases reported October–March | Enzootic cycle might not be sustainable; outbreaks may follow introductions of virus |

¹Data are based on published reports and personal correspondence. Risk assessments should be performed cautiously, because risk can vary within areas and from year to year, and surveillance data regarding human cases and JEV transmission are incomplete.

²In some endemic areas, human cases among residents are limited because of vaccination or natural immunity. However, because JEV is maintained in an enzootic cycle between animals and mosquitoes, susceptible visitors to these areas still may be at risk for infection.