

State Mapping Note: Severe Dengue Episode

Approved P2 mapping for the 2025 Americas experimental dengue pilot

APPROVED FOR SERIES-SPECIFIC EXPERIMENTAL PILOT RELEASE | Mapping version 1.0

Field	Approved value
Mapping ID	DENGUE_SEVERE_AMERICAS_v1.0
Source category	Reported severe dengue
Maturity	P2 - evidence-informed
Review status	Approved by author for experimental pilot release
Intensity low / central / high	6 / 7 / 8
Duration low / central / high	4 / 7 / 14 days
Model type	Cumulative episode
p and overlap	p=1; no overlap
Reference burden	R1 = 1.96875 intensity-days

State description

Reported severe dengue episode. The pilot interpretation averages acute pre-critical, critical, and early recovery experience across one modeled episode.

Included experiences

Severe abdominal pain, persistent vomiting, bleeding, respiratory distress, shock or organ involvement, weakness, fear, hospitalization-related distress, and early recovery.

Excluded or separately reported

Death as an outcome; post-acute sequelae beyond 14 days; caregiver burden; financial loss; unrelated comorbidity.

Mapping rationale

Severe dengue includes shock, respiratory distress, severe bleeding, or organ involvement. The critical phase is shorter than the full illness, so the duration envelope represents the complete acute episode rather than time at peak intensity. The 6/7/8 intensity range is an author-defined time-averaged overall experiential mapping.

Interpretation boundaries

- This is not a patient-elicited overall suffering score.
- The low-high mapping range is not a confidence interval.
- Mortality is reported separately.
- Any mapping change requires a new version and recalculation.

Sources

5. **World Health Organization. Dengue fact sheet.** <https://www.who.int/news-room/fact-sheets/detail/dengue-and-severe-dengue>
6. **US Centers for Disease Control and Prevention. Clinical Features of Dengue.** <https://www.cdc.gov/dengue/hcp/clinical-signs/index.html>
7. **Pan American Health Organization. Dengue: Symptoms, Prevention and Treatments.** <https://www.paho.org/en/topics/dengue>
8. **Wong JGX, et al. Self-reported pain intensity with the numeric reporting scale in adult dengue. PLoS One. 2014;9:e96514.** <https://doi.org/10.1371/journal.pone.0096514>
9. **Ang LW, et al. A 15-year review of dengue hospitalizations in Singapore. PLoS Negl Trop Dis. 2019;13:e0007389.** <https://doi.org/10.1371/journal.pntd.0007389>
10. **Tiga-Loza DC, et al. Persistence of symptoms in dengue patients. Trans R Soc Trop Med Hyg. 2020;114:355-364.** <https://doi.org/10.1093/trstmh/traa007>