

# The seven dangerous days: Thailand's biannual road traffic accident surges linked to inequality

Nakaret Kungsukun,<sup>a</sup> Suphasan Kaeoaudom,<sup>a</sup> and Apichai Wattanapisit<sup>a,b,c,\*</sup>

<sup>a</sup>School of Medicine, Walailak University, Nakhon Si Thammarat, Thailand

<sup>b</sup>Walailak University Hospital, Nakhon Si Thammarat, Thailand

<sup>c</sup>The Excellent Center of Community Health Promotion, Walailak University, Nakhon Si Thammarat, Thailand

The 'seven dangerous days' is a preventive operational measure during the national Thai holidays from late December to early January (the new year) and mid-April (Songkran—the Thai new year). It covers 3–5 days of the holiday and the days before and after them. The highest incidence of traffic accidents occurs during these periods of the year.<sup>1,2</sup> The seven dangerous days are recognised in two different ways: as biannual events marked by significant losses and as an official road safety campaign.

According to the reports of the Road Accident Victims Protection Company, 9160 deaths were reported from January to August 2024 (244 days), averaging 38 deaths per day.<sup>3</sup> During the seven dangerous days, 486 deaths (69 deaths per day) were reported during the 2024 New Year Festival, while 480 deaths (69 deaths per day) were reported during the 2024 Songkran Festival.<sup>3</sup> These data show significant biannual surges in deaths and injuries caused by road traffic crashes.

Inequality accounts for disparity in road traffic accidents and injuries. For example, low-income and minority groups may have less safe vehicles.<sup>4,5</sup> The 'seven dangerous days' highlight the surges in road traffic accidents, reflecting the effects of inequality. This article discusses three topics: (i) centralisation of economic power; (ii) road safety and public transportation; and (iii) the capacity of emergency services.

## Centralisation of economic power

Bangkok, the capital city, is the most populated province among 77 provinces, with 5 million out of the approximately 66 million people in the country.<sup>6</sup> Additionally, it has many non-registered and commuter populations. The population of Bangkok is projected to increase annually. This growth is a result of the nation's development as a single-growth city. Bangkok is the country's political, social, and cultural centre and houses its top academic institutions. Approximately 14.5% of Thailand's labour force is employed in Bangkok, which is comparable to that of 17 provinces in the northern region.<sup>7</sup>

\*Corresponding author. School of Medicine, Walailak University, Nakhon Si Thammarat, 80160, Thailand.

E-mail address: [apichai.wa@wu.ac.th](mailto:apichai.wa@wu.ac.th) (A. Wattanapisit).

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During the longest national holidays of the year (New Year and Songkran), many people leave the capital and economic cities to travel to their hometowns or tourist attractions. Due to the congestion of railways and unaffordable flight fares, road travel is a common option, including via public and personal vehicles. Consequently, the number of road users and traffic accidents increases significantly during the seven dangerous days biannually.

## Road safety and public transportation

Beyond human factors, road safety is a critical issue affecting traffic accidents. Statistics show that 43% of accidents are caused by faulty vehicle parts (e.g., wheel systems, electrical systems, and damaged tires).<sup>8</sup> Another important factor is the road environment and quality. Over 23% of accidents are caused by rain and slippery roads, and 5% are due to unclear traffic lights and road signs.<sup>8</sup> These issues may indicate a lack of maintenance of personal and public vehicles and poor traffic management. People with low socioeconomic status may have fewer options for quality public transportation and well-maintained personal vehicles.

Common public transportation options for long-distance travel in Thailand include buses, minibuses, trains, and aeroplanes. High-speed trains are not yet available in the country. Furthermore, a trans-provincial train journey may take 8–12 times longer than a flight. Outside the capital city, rail public transport is unavailable in most provinces for near-to medium-distance travel. Motorcycles are a popular and more affordable means of transport. However, they are associated with a higher prevalence and severity of accidents than other vehicles.<sup>9</sup> Motorcycles were the most susceptible vehicle (82%) to road traffic deaths in Thailand in 2024.<sup>3</sup>

## Capacity of emergency services

Although the Medical Emergency Call number (1669) serves as a universal emergency hotline across Thailand, there is a disparity in the capacity of emergency services. All 77 provinces in the country are grouped into 13 Health Network Regions. Each region consists of 4–8 provinces, except for the 13th Health Network Region, which represents only Bangkok. Table 1 illustrates the disparity in workforce and facilities for emergency services.<sup>10</sup>



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| Resource                           | Bangkok (only province in the 13th Health Network Region) [n, (%)] | Other 12 health network regions (4–8 provinces in each region) [range in each region] |
|------------------------------------|--|---|
| Emergency physician (N = 946)      | 250 (26.4)   | 27–97   |
| General surgeon (N = 1999)         | 574 (28.7)   | 72–210  |
| Neurosurgeon (N = 442)             | 145 (32.8)   | 10–46   |
| Trauma surgeon (N = 44)            | 26 (59.1)  | 0–7   |
| Ambulance (N = 5968)               | 616 (10.3)   | 285–654   |
| Computed tomography scan (N = 690) | 159 (23.0)   | 19–82   |

**Table 1: Public health resources related to emergency services in 2022.**

## Conclusion

The ‘seven dangerous days’ are periods during the long holidays in Thailand that occur twice a year when road traffic accidents and casualties increase significantly. Higher rates of road traffic deaths are reported during these times. Inequality is a root cause of this phenomenon. Three key issues, including the centralisation of economic power, road safety, and public transportation, and differences in the capacity of emergency services, are addressed as links between inequality and the surge in traffic accidents. Recognising inequality is essential to understanding the determinants of road traffic accidents and improving overall road safety.

## Contributors

Nakaret Kungsukun: Conceptualization, Data curation, Project administration, Writing-original draft, and Writing-review & editing.

Suphasan Kaoaudom: Conceptualization, Data curation, Writing-original draft, and Writing-review & editing.

Apichai Wattanapisit: Conceptualization, Supervision, Writing-original draft, and Writing-review & editing.

## Declaration of interests

The authors declare no conflicts of interest.

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