

# No Severe Disparity in Emergency Transport Time between Urban and Rural Children in Japan

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[Background] In Japan, the mean time from emergency call to arrival at medical facilities is 39.3 minutes in 2013. However, that of pediatric patients and the regional disparity between urban and rural places were unknown.

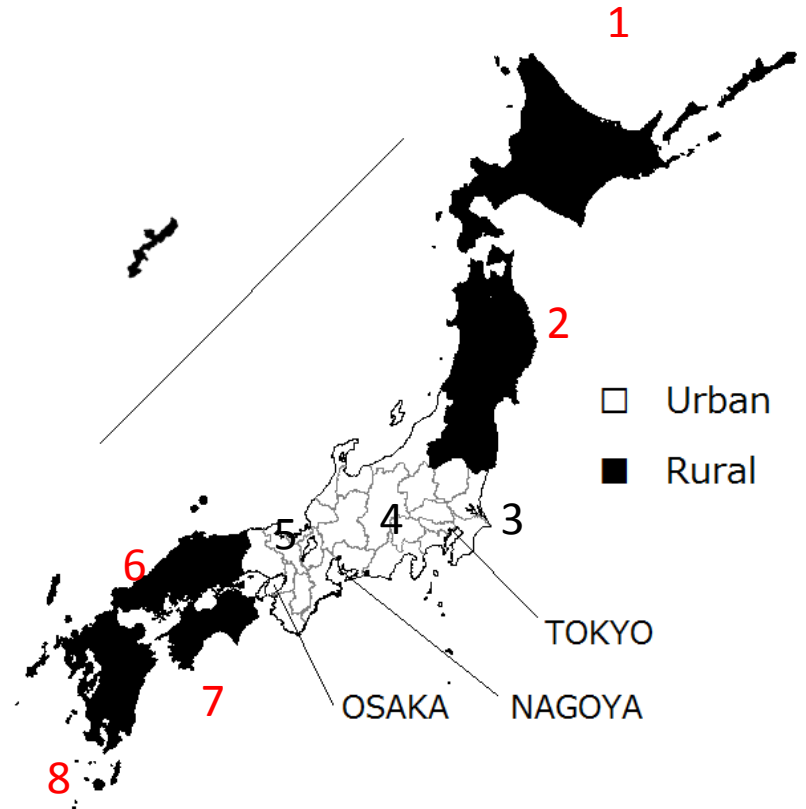
[Objective] To clarify transport time of children to medical facilities and the regional disparity between urban and rural places.

# Urban and Rural Regions in Japan

[Methods] Using Emergency Transport Patient's Database, 2012 provided by Fire and Disaster Management Agency, the Ministry of Internal Affairs and Communications, I calculated transport time for neonates, toddlers and children in the 3 urban (Kanto, Chubu, and Kinki) and 5 rural (Hokkaido, Tohoku, Chugoku, Shikoku, and Kyushu) regions in Japan.

Urban: 3.Kanto, 4.Chubu, 5.Kinki

Rural: 1.Hokkaido, 2. Tohoku, 6.Chugoku  
7.Shikoku, 8. Kyushu



# Results: Emergency Transport Time between Urban and Rural Children

The mean transport times were 38.3 minutes in neonates, 33.4 minutes in toddlers, and 35.6 minutes in children. **Those in urban regions were 36.6 minutes in neonates, 32.4 minutes in toddlers, and 33.9 minutes in children,** respectively. On the other hand, **those in rural regions were 39.3 minutes in neonates, 33.7 minutes in toddlers, and 36.4 minutes in children,** respectively (Table 1).

Table 1. Mean Transport Time (min)

	Urban		Rural		Total	
	No	Time(min)	No	Time(min)	No	Time(min)
Neonates	7,681	36.6	4,091	39.3	11,772	38.3
Toddlers	159,074	32.4	61,875	33.7	220,949	33.4
Children	122,438	33.9	56,346	36.4	178,784	35.6

The ratios of transport time above 60 minutes in urban regions were **10.8% in neonates, 3.7% in toddlers, and 6.1% in children,** respectively. **In rural regions, those in neonates, toddlers, and children were, 11.5%, 4.0%, and 4.9%,** respectively (Table 2).

Table 2. Transport Time >60min (%)

	Urban		Rural		Total	
	No	Ratio	No	Ratio	No	Ratio
Neonates	7,681	10.8%	4,091	11.5%	11,772	11.0%
Toddlers	159,074	3.7%	61,875	4.0%	220,949	3.8%
Children	122,438	6.1%	56,346	4.9%	178,784	5.7%

# Conclusion

- There was no severe disparity in emergency transport time between urban and rural pediatric patients in Japan.
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