

Thailand

Motorcycle Helmet Use

2010 - 2012

Motorcycle Helmet Use in 2012*

Rider	52%
Passenger	20%
All Motorcyclists	43%

* A total of 1,502,949 motorcycle riders and passengers were observed in 2012

By

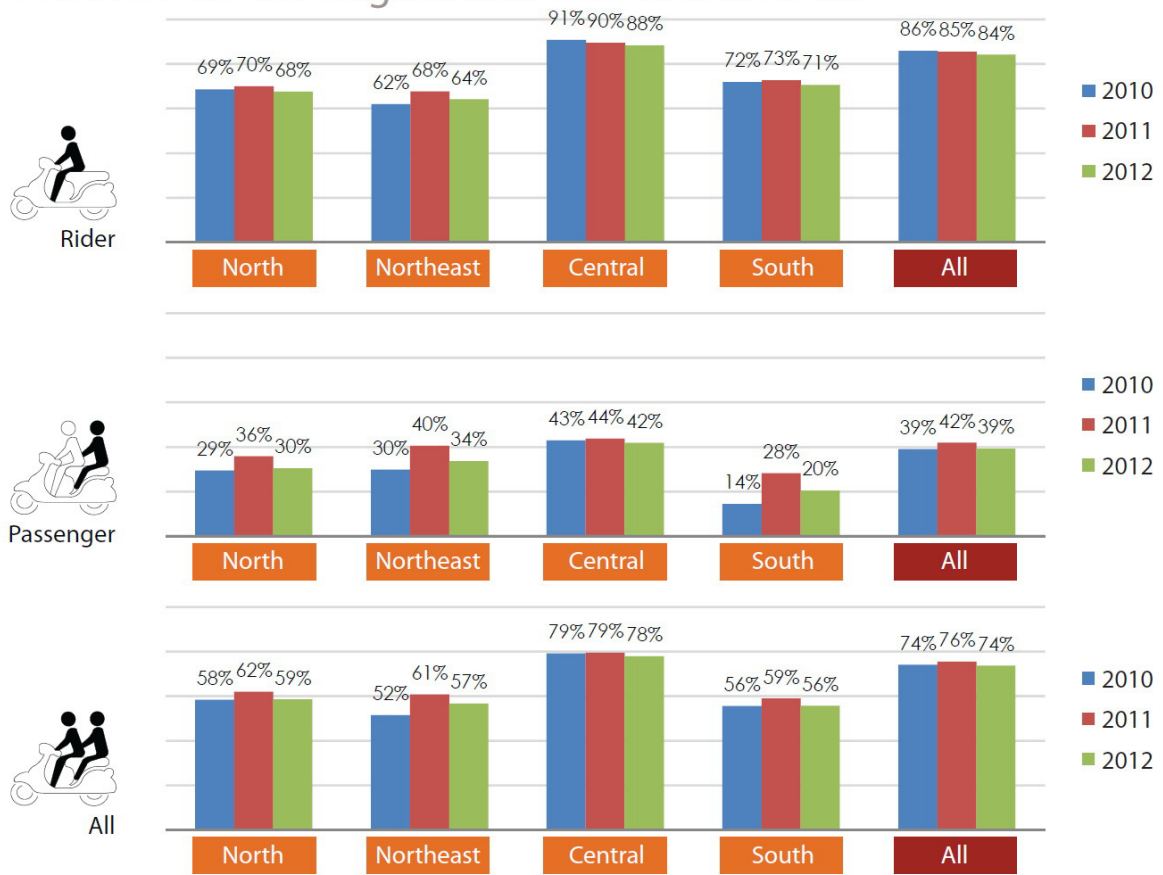
ThaiRoads Foundation, Road Safety Watch Network*, and Thai Health Promotion Foundation



* Thailand Accident Research Center, Asian Institute of Technology, Suranaree University of Technology, Naresuan University, Chiang Mai University, Burapha University, Walailak University and Nakhon Phanom University

Comparison of Helmet Use Between Urban and Rural Motorcyclists (2010 - 2012)

Motorcycle Helmet Use in Bangkok and Core Urban Areas



Motorcycle Helmet Use in Rural Municipalities



Top 10 Highest and Lowest Helmet Use by Province

All Riders and Passengers

10 Provinces with Highest Motorcycle Helmet Use

No.	Province	2010	No.	Province	2011	No.	Province	2012	No.	Province	Average*
1	Bangkok	82%	1	Bangkok	82%	1	Bangkok	80%	1	Bangkok	81%
2	Phuket	71%	2	Phuket	71%	2	Phuket	67%	2	Phuket	69%
3	Loei	68%	3	Nonthaburi	64%	3	Nonthaburi	67%	3	Nonthaburi	65%
4	Samutprakarn	68%	4	Samutprakarn	62%	4	Samutprakarn	61%	4	Samutprakarn	63%
5	Nonthaburi	62%	5	Pitsanulok	58%	5	Pathumthani	56%	5	Pathumthani	55%
6	Pathumthani	56%	6	Singburi	57%	6	Saraburi	55%	6	Saraburi	55%
7	Nongbualamphu	55%	7	Saraburi	57%	7	Pitsanulok	52%	7	Pitsanulok	54%
8	Pitsanulok	51%	8	Kampaengphet	55%	8	Tak	51%	8	Singburi	52%
9	Saraburi	50%	9	Nakhonratchasima	54%	9	Ranong	51%	9	Nakhonratchasima	50%
10	Surin	49%	10	Pathumthani	53%	10	Singburi	50%	10	Chonburi	48%

* An average helmet usage rate between year 2010-2012 calculated by using sample weights for each year

10 Provinces with Lowest Motorcycle Helmet Use

No.	Province	2010	No.	Province	2011	No.	Province	2012	No.	Province	Average*
1	Narathiwat	15%	1	Narathiwat	19%	1	Bungkan	16%	1	Narathiwat	18%
2	Pattani	18%	2	Bungkan	19%	2	Lamphun	19%	2	Bungkan	18%
3	Pangnga	23%	3	Buriram	23%	3	Chaiyaphum	19%	3	Pattani	22%
4	Angthong	23%	4	Yasothon	23%	4	Narathiwat	19%	4	Yala	24%
5	Petchaburi	23%	5	Phrae	23%	5	Nakhonphanom	20%	5	Sakaeo	25%
6	Kanchanaburi	24%	6	Sakaeo	23%	6	Yala	21%	6	Buriram	25%
7	Phatthalung	25%	7	Chaiyaphum	24%	7	Pattani	22%	7	Phrae	26%
8	Buriram	25%	8	Pattani	25%	8	Roiet	23%	8	Angthong	26%
9	Prachinburi	25%	9	Yala	26%	9	Maehongson	24%	9	Lamphun	26%
10	Chainat	26%	10	Chainat	26%	10	Angthong	25%	10	Chaiyaphum	26%

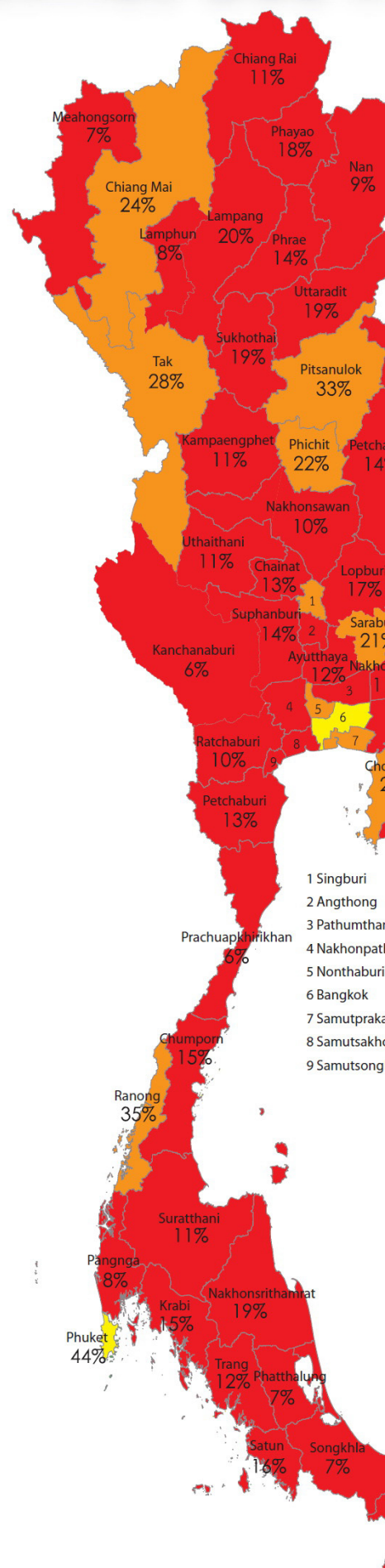
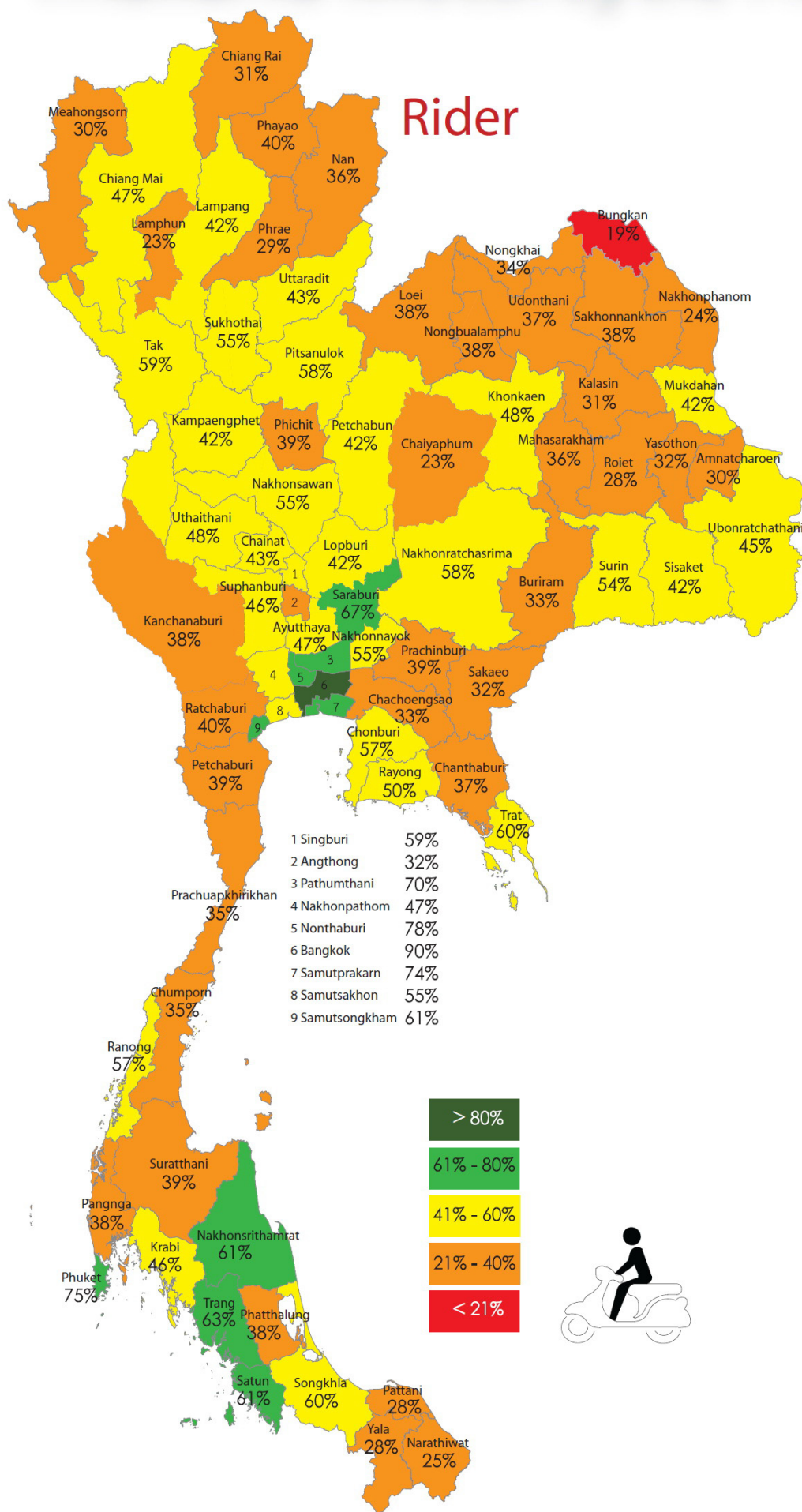
* An average helmet usage rate between year 2010-2012 calculated by using sample weights for each year

Sampling Methodology for Observational Survey*

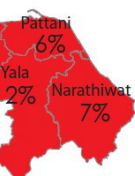
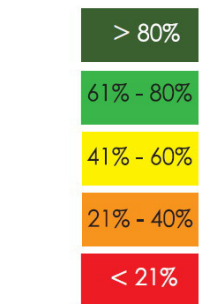
	Bangkok	76 Regional Provinces		
Stratification	50 Stratum	1st Stratum: Core urban area	2nd Stratum: Non-core urban area	3rd Stratum: Rural municipality
Definition	50 Bangkok administrative districts	City municipality or town municipality which is the center of economic activities	Non-core town municipality or subdistrict municipality with population over 20,000	Subdistrict municipality with population less than 20,000
Sampling frame	Main roads and minor roads	One city or town municipality selected with certainty	Random selection by geography 2 municipalities (if total municipalities < 3) 3 municipalities (if total municipalities 4-8) 4 municipalities (if total municipalities > 9)	Random selection by geography and with a probability proportion to population 4 municipalities (if total municipalities < 10) 8 municipalities (if total municipalities 11-20) 12 municipalities (if total municipalities 21-30) 16 municipalities (if total municipalities > 30)
Site characteristic	Intersection	Intersection or road segment with slow traffic	Intersection or road segment with slow traffic	Intersection or road segment with slow traffic
Observation sites	2 sites per district	Subject to municipality population 14 sites (population < 100,000) 28 sites (population > 100,000)	Subject to municipality population 4 sites (population < 20,000) 8 sites (population 20,000-40,000) 12 sites (population > 40,000)	2 sites per municipality
Day	Uniformly distributed over weekdays (Monday through Friday) and weekends (Saturday and Sunday)	Uniformly distributed over weekdays (Monday through Friday) and weekends (Saturday and Sunday)	Uniformly distributed over weekdays (Monday through Friday) and weekends (Saturday and Sunday)	Uniformly distributed over weekdays (Monday through Friday) and weekends (Saturday and Sunday)
Time	Morning, afternoon, evening, and night time. Uniformly distributed over 7 time slots: 07:00-08:00 09:00-10:00 11:00-12:00 13:00-14:00 15:00-16:00 17:00-18:00 19:00-20:00	Morning, afternoon, evening, and night time. Uniformly distributed over 7 time slots: 07:00-08:00 09:00-10:00 11:00-12:00 13:00-14:00 15:00-16:00 17:00-18:00 19:00-20:00	Morning, afternoon, and evening. Uniformly distributed over 6 time slots: 07:00-08:00 09:00-10:00 11:00-12:00 13:00-14:00 15:00-16:00 17:00-18:00	Morning, afternoon, and evening. Uniformly distributed over 4 time slots: 07:00-09:00 10:00-12:00 13:00-15:00 16:00-18:00
Duration	1-hour observation period for each site	1-hour observation period for each site	1-hour observation period for each site	45-minute observation period for each site
Data	Helmet use by seating position (rider and passenger) and age group (adult, teen, and child)	Helmet use by seating position (rider and passenger) and age group (adult, teen, and child)	Helmet use by seating position (rider and passenger) and age group (adult, teen, and child)	Helmet use by seating position (rider and passenger) and age group (adult, teen, and child)

* Total number of observation sites are 3,274

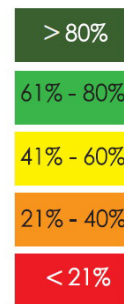
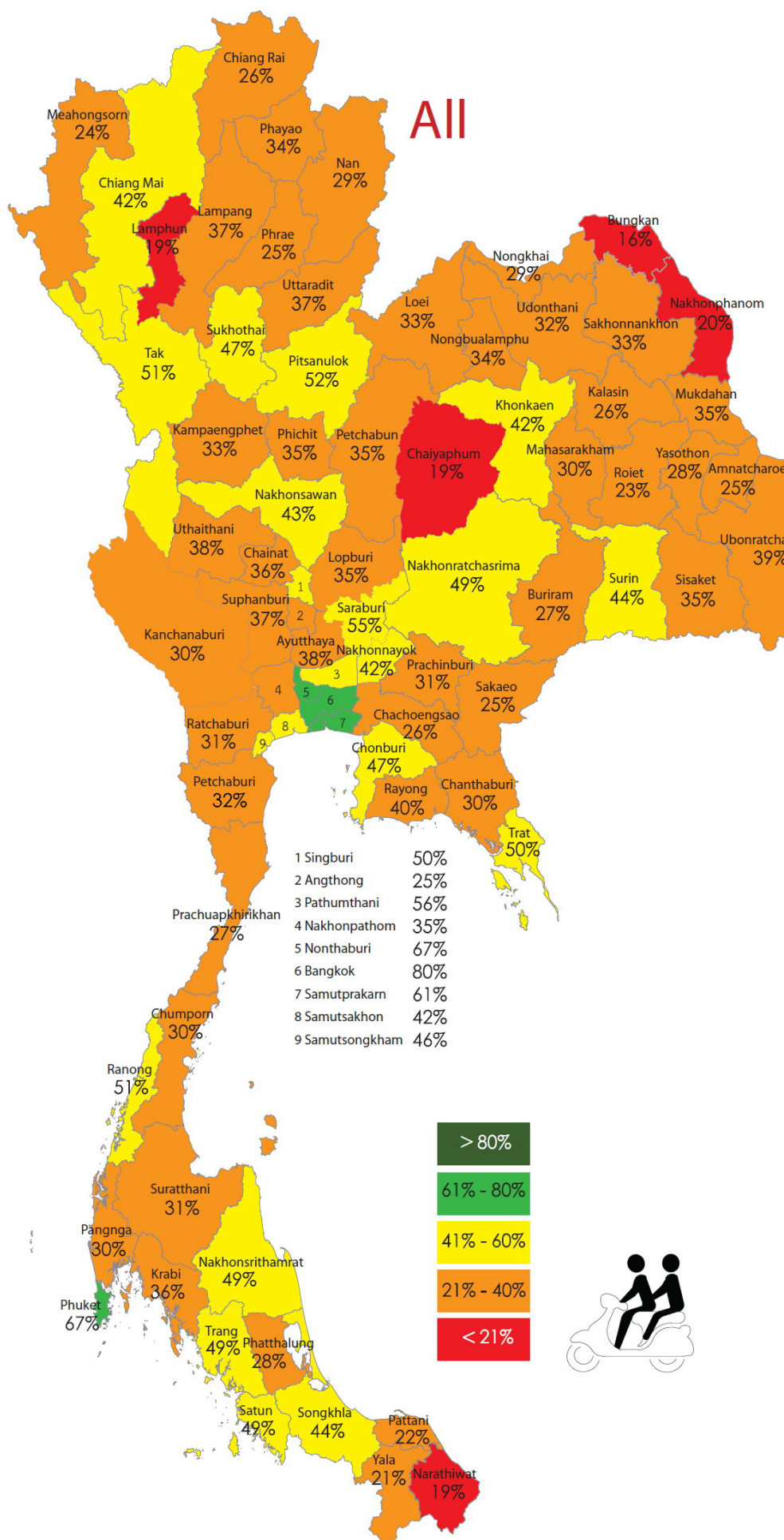
Thailand Motorcycle Helmet Use in



Passenger



All



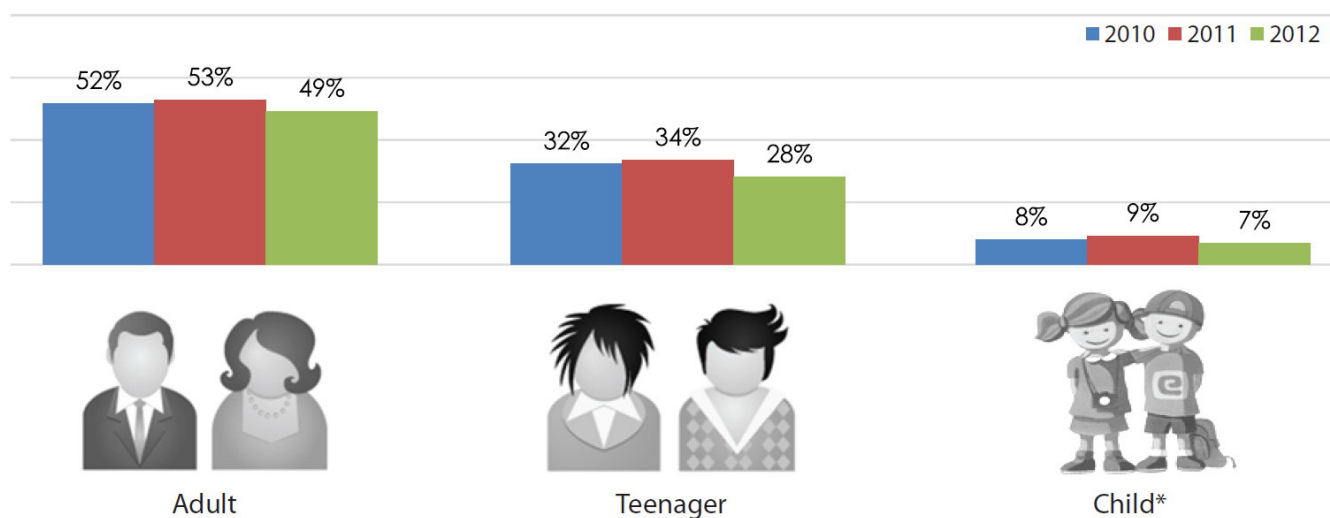
Motorcycle Helmet Use by Region

2010 - 2012



Motorcycle Helmet Use by Age Group

2010 - 2012



* Only child passengers