

# TANZANIA



**Malaria Indicator Survey (TMIS)  
Key Indicators  
2017**

The 2017 Tanzania Malaria Indicator Survey (2017 TMIS) was implemented by the National Bureau of Statistics (NBS) and Office of the Chief Government Statistician (OCGS), Zanzibar, in collaboration with the Ministry of Health, Community Development, Gender, Elderly and Children, Mainland, and the Ministry of Health, Zanzibar. Financial support for the survey was provided by the President's Malaria Initiative (PMI) and the Global Fund. ICF provided technical assistance through The DHS Program, a USAID-funded project offering support and technical assistance in the implementation of population and health surveys in countries worldwide.

The primary objectives of the 2017 TMIS are to measure the level of ownership and use of mosquito nets; assess coverage of intermittent preventive treatment for pregnant women; identify treatment practices, including the use of specific antimalarial medications to treat malaria among children age 6-59 months; measure the prevalence of malaria and anemia among children age 6-59 months; and assess knowledge, attitudes, and practices among adults with malaria.

This table provides estimates of key indicators for the country as a whole and for each of the 31 geographic regions in Tanzania. A comprehensive analysis of the 2017 TMIS data will be presented in a final report.

Additional information about the 2017 TMIS may be obtained from the National Bureau of Statistics (NBS), Head Office, 18 Kivukoni Road, P.O. Box 796, 11992, Dar es Salaam, Tanzania. Telephone: 255-22-212-2722/3; Fax: 255-22-213-0852; E-mail: [dg@nbs.go.tz](mailto:dg@nbs.go.tz); Internet: [www.nbs.go.tz](http://www.nbs.go.tz).

Information about The DHS Program may be obtained from ICF, 530 Gaither Road, Suite 500, Rockville, MD 20850, USA; Telephone: +1-301-407-6500; Fax: +1-301-407-6501; E-mail: [info@DHSprogram.com](mailto:info@DHSprogram.com); Internet: [www.DHSprogram.com](http://www.DHSprogram.com).

*Cover Photo: Schoolchildren receive free bed nets during a distribution at Buhigwe School, Tanzania. © 2017 Magali Rochat/VectorWorks, Courtesy of Photoshare*



# Tanzania Malaria Indicator Survey (TMIS) Key Indicators 2017

Ministry of Health, Community Development, Gender, Elderly and Children  
Dodoma

Ministry of Health  
Zanzibar

National Bureau of Statistics (NBS)  
Dar es Salaam

Office of Chief Government Statistician (OCGS)  
Zanzibar

The DHS Program  
Rockville, Maryland USA

February 2018



U.S. President's Malaria Initiative



Malaria Indicator	National	Residence		Mainland		Zanzibar	
		Urban	Rural	Urban	Rural	Unguja	Pemba
<b>MOSQUITO NETS</b>							
Percentage of households with at least one insecticide-treated net (ITN) <sup>1</sup>	77.9	80.5	76.6	80.5	76.6	77.1	83.2
Percentage of households with at least one ITN for every two persons who stayed in the household last night <sup>1</sup>	45.4	50.3	42.9	50.6	42.8	40.3	46.0
Percentage of children under age 5 who slept under an ITN last night <sup>1</sup>	54.6	66.8	50.2	66.7	49.7	63.6	72.0
Percentage of pregnant women age 15-49 who slept under an ITN last night <sup>1</sup>	51.4	59.0	48.6	58.9	48.2	(57.5)	(70.8)
Percentage of the de facto household population who could sleep under an ITN <sup>1</sup> if each ITN in the household were used by up to two people (Access)	62.5	68.7	59.9	69.0	59.8	58.9	67.2
Percentage of population who slept under an ITN <sup>1</sup> last night	52.2	64.6	46.9	64.9	46.4	55.8	64.7
Ratio of population ITN <sup>1</sup> use to population ITN access	0.84	0.94	0.78	0.94	0.78	0.95	0.96
<b>INTERMITTENT PREVENTIVE MALARIA TREATMENT DURING PREGNANCY</b>							
Percentage of women age 15-49 with a live birth in the 2 years preceding the survey who, during the pregnancy preceding the last birth, received two or more doses of SP/Fansidar	56.1	66.0	52.6	67.2	53.5	22.8	11.7
Percentage of women age 15-49 with a live birth in the 2 years preceding the survey who, during the pregnancy preceding the last birth, received three or more doses of SP/Fansidar	25.8	31.0	24.0	31.6	24.5	7.9	1.5
<b>PREVALENCE, DIAGNOSIS, AND TREATMENT OF CHILDREN WITH FEVER</b>							
Percentage of children under age 5 with fever in the 2 weeks preceding the survey	20.4	19.8	20.6	20.1	20.7	9.7	23.3
Among children under age 5 with fever in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought <sup>2</sup>	75.4	77.6	74.6	77.3	74.5	(90.0)	77.9
Among children under age 5 with fever in the 2 weeks preceding the survey, percentage who had blood taken from a finger or heel for testing	43.1	56.0	38.6	56.0	38.9	(50.4)	21.0
<b>MALARIA PARASITEMIA</b>							
Percentage of children age 6-59 months with a positive rapid diagnostic test (RDT) result	7.3	2.1	9.2	2.2	9.5	0.4	0.0

<sup>1</sup> An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2010 TDHS, 2011-12 THMIS, and 2015-16 TDHS-MIS, this was known as a long-lasting insecticidal net (LLIN).

<sup>2</sup> Excludes advice or treatment from a traditional practitioner

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Malaria Indicator	Region					
	Dodoma	Arusha	Kilimanjaro	Tanga	Morogoro	Pwani
<b>MOSQUITO NETS</b>						
Percentage of households with at least one insecticide-treated net (ITN) <sup>1</sup>	78.4	68.3	81.3	88.1	88.3	88.8
Percentage of households with at least one ITN for every two persons who stayed in the household last night <sup>1</sup>	47.6	47.6	61.8	50.6	57.5	61.8
Percentage of children under age 5 who slept under an ITN last night <sup>1</sup>	42.5	52.7	65.7	69.0	68.8	79.8
Percentage of the de facto household population who could sleep under an ITN <sup>1</sup> if each ITN in the household were used by up to two people (Access)	62.3	61.1	73.1	72.0	73.7	76.5
Percentage of population who slept under an ITN <sup>1</sup> last night	34.0	42.1	54.9	67.4	71.7	77.5
Ratio of population ITN <sup>1</sup> use to population ITN access	0.55	0.69	0.75	0.94	0.97	1.01
<b>INTERMITTENT PREVENTIVE MALARIA TREATMENT DURING PREGNANCY</b>						
Percentage of women age 15-49 with a live birth in the 2 years preceding the survey who, during the pregnancy preceding the last birth, received two or more doses of SP/Fansidar	50.5	(69.7)	(77.8)	70.6	72.4	67.5
Percentage of women age 15-49 with a live birth in the 2 years preceding the survey who, during the pregnancy preceding the last birth, received three or more doses of SP/Fansidar	11.8	(28.3)	(37.0)	38.0	42.8	24.4
<b>PREVALENCE, DIAGNOSIS, AND TREATMENT OF CHILDREN WITH FEVER</b>						
Percentage of children under age 5 with fever in the 2 weeks preceding the survey	12.0	20.4	19.0	20.1	18.9	16.4
Among children under age 5 with fever in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought <sup>2</sup>	*	*	*	(88.2)	79.8	(90.6)
Among children under age 5 with fever in the 2 weeks preceding the survey, percentage who had blood taken from a finger or heel for testing	*	*	*	(74.0)	44.9	(80.6)
<b>MALARIA PARASITEMIA</b>						
Percentage of children age 6-59 months with a positive rapid diagnostic test (RDT) result	0.6	0.0	0.0	3.1	9.5	5.3

<sup>1</sup> An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2010 TDHS, 2011-12 THMIS, and 2015-16 TDHS-MIS, this was known as a long-lasting insecticidal net (LLIN).

<sup>2</sup> Excludes advice or treatment from a traditional practitioner

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Malaria Indicator	Region				
	Dar es Salaam	Lindi	Mtwara	Ruvuma	Iringa
<b>MOSQUITO NETS</b>					
Percentage of households with at least one insecticide-treated net (ITN) <sup>1</sup>	79.4	81.5	78.8	77.0	65.8
Percentage of households with at least one ITN for every two persons who stayed in the household last night <sup>1</sup>	55.3	60.2	58.0	51.8	36.8
Percentage of children under age 5 who slept under an ITN last night <sup>1</sup>	64.8	59.1	67.0	59.8	54.6
Percentage of the de facto household population who could sleep under an ITN <sup>1</sup> if each ITN in the household were used by up to two people (Access)	70.8	72.4	74.7	69.5	55.2
Percentage of population who slept under an ITN <sup>1</sup> last night	66.4	55.6	64.4	53.4	51.1
Ratio of population ITN <sup>1</sup> use to population ITN access	0.94	0.77	0.86	0.77	0.93
<b>INTERMITTENT PREVENTIVE MALARIA TREATMENT DURING PREGNANCY</b>					
Percentage of women age 15-49 with a live birth in the 2 years preceding the survey who, during the pregnancy preceding the last birth, received two or more doses of SP/Fansidar	66.6	79.8	83.5	60.5	78.1
Percentage of women age 15-49 with a live birth in the 2 years preceding the survey who, during the pregnancy preceding the last birth, received three or more doses of SP/Fansidar	41.5	42.8	46.7	27.4	39.6
<b>PREVALENCE, DIAGNOSIS, AND TREATMENT OF CHILDREN WITH FEVER</b>					
Percentage of children under age 5 with fever in the 2 weeks preceding the survey	22.0	24.0	27.9	22.0	13.3
Among children under age 5 with fever in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought <sup>2</sup>	(73.7)	86.3	79.0	(79.8)	*
Among children under age 5 with fever in the 2 weeks preceding the survey, percentage who had blood taken from a finger or heel for testing	(69.3)	73.2	64.3	(60.2)	*
<b>MALARIA PARASITEMIA</b>					
Percentage of children age 6-59 months with a positive rapid diagnostic test (RDT) result	1.1	11.7	14.8	11.8	2.0

<sup>1</sup> An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2010 TDHS, 2011-12 THMIS, and 2015-16 TDHS-MIS, this was known as a long-lasting insecticidal net (LLIN).

<sup>2</sup> Excludes advice or treatment from a traditional practitioner

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Malaria Indicator	Region				
	Mbeya	Singida	Tabora	Rukwa	Kigoma
<b>MOSQUITO NETS</b>					
Percentage of households with at least one insecticide-treated net (ITN) <sup>1</sup>	73.5	67.4	71.9	65.3	75.9
Percentage of households with at least one ITN for every two persons who stayed in the household last night <sup>1</sup>	47.7	25.2	29.6	37.0	33.6
Percentage of children under age 5 who slept under an ITN last night <sup>1</sup>	37.3	31.5	35.7	36.3	61.1
Percentage of the de facto household population who could sleep under an ITN <sup>1</sup> if each ITN in the household were used by up to two people (Access)	61.9	42.1	48.5	47.9	57.6
Percentage of population who slept under an ITN <sup>1</sup> last night	32.4	28.8	33.9	32.1	55.0
Ratio of population ITN <sup>1</sup> use to population ITN access	0.52	0.68	0.70	0.67	0.95
<b>INTERMITTENT PREVENTIVE MALARIA TREATMENT DURING PREGNANCY</b>					
Percentage of women age 15-49 with a live birth in the 2 years preceding the survey who, during the pregnancy preceding the last birth, received two or more doses of SP/Fansidar	53.9	52.4	32.9	49.9	42.4
Percentage of women age 15-49 with a live birth in the 2 years preceding the survey who, during the pregnancy preceding the last birth, received three or more doses of SP/Fansidar	25.0	25.8	11.8	22.2	12.7
<b>PREVALENCE, DIAGNOSIS, AND TREATMENT OF CHILDREN WITH FEVER</b>					
Percentage of children under age 5 with fever in the 2 weeks preceding the survey	16.2	20.3	25.0	26.7	22.3
Among children under age 5 with fever in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought <sup>2</sup>	*	74.4	70.5	(84.7)	74.3
Among children under age 5 with fever in the 2 weeks preceding the survey, percentage who had blood taken from a finger or heel for testing	*	14.9	34.0	(54.6)	37.4
<b>MALARIA PARASITEMIA</b>					
Percentage of children age 6-59 months with a positive rapid diagnostic test (RDT) result	4.0	2.3	11.7	1.8	24.4

<sup>1</sup> An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2010 TDHS, 2011-12 THMIS, and 2015-16 TDHS-MIS, this was known as a long-lasting insecticidal net (LLIN).

<sup>2</sup> Excludes advice or treatment from a traditional practitioner

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Malaria Indicator	Region				
	Shinyanga	Kagera	Mwanza	Mara	Manyara
<b>MOSQUITO NETS</b>					
Percentage of households with at least one insecticide-treated net (ITN) <sup>1</sup>	68.2	79.9	83.5	88.4	75.3
Percentage of households with at least one ITN for every two persons who stayed in the household last night <sup>1</sup>	28.0	48.3	38.9	46.9	35.3
Percentage of children under age 5 who slept under an ITN last night <sup>1</sup>	43.6	56.0	71.3	67.6	45.0
Percentage of the de facto household population who could sleep under an ITN <sup>1</sup> if each ITN in the household were used by up to two people (Access)	49.1	68.2	65.8	71.8	57.0
Percentage of population who slept under an ITN <sup>1</sup> last night	38.5	54.4	67.8	67.4	42.1
Ratio of population ITN <sup>1</sup> use to population ITN access	0.78	0.80	1.03	0.94	0.74
<b>INTERMITTENT PREVENTIVE MALARIA TREATMENT DURING PREGNANCY</b>					
Percentage of women age 15-49 with a live birth in the 2 years preceding the survey who, during the pregnancy preceding the last birth, received two or more doses of SP/Fansidar	53.9	63.9	63.5	50.0	58.0
Percentage of women age 15-49 with a live birth in the 2 years preceding the survey who, during the pregnancy preceding the last birth, received three or more doses of SP/Fansidar	25.3	40.0	19.2	21.2	26.3
<b>PREVALENCE, DIAGNOSIS, AND TREATMENT OF CHILDREN WITH FEVER</b>					
Percentage of children under age 5 with fever in the 2 weeks preceding the survey	20.9	18.4	18.9	29.2	22.8
Among children under age 5 with fever in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought <sup>2</sup>	83.2	(62.3)	85.5	61.6	(72.2)
Among children under age 5 with fever in the 2 weeks preceding the survey, percentage who had blood taken from a finger or heel for testing	22.2	(55.2)	51.1	32.7	(33.4)
<b>MALARIA PARASITEMIA</b>					
Percentage of children age 6-59 months with a positive rapid diagnostic test (RDT) result	6.1	15.4	8.1	11.2	0.0

<sup>1</sup> An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2010 TDHS, 2011-12 THMIS, and 2015-16 TDHS-MIS, this was known as a long-lasting insecticidal net (LLIN).

<sup>2</sup> Excludes advice or treatment from a traditional practitioner

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.



Malaria Indicator	Region				
	Njombe	Katavi	Simiyu	Geita	Songwe
<b>MOSQUITO NETS</b>					
Percentage of households with at least one insecticide-treated net (ITN) <sup>1</sup>	58.1	66.3	80.9	76.5	76.4
Percentage of households with at least one ITN for every two persons who stayed in the household last night <sup>1</sup>	41.7	27.0	31.4	26.8	45.7
Percentage of children under age 5 who slept under an ITN last night <sup>1</sup>	11.6	39.6	46.6	55.0	33.5
Percentage of the de facto household population who could sleep under an ITN <sup>1</sup> if each ITN in the household were used by up to two people (Access)	51.3	44.5	53.2	51.5	65.0
Percentage of population who slept under an ITN <sup>1</sup> last night	16.1	33.6	40.6	52.2	34.0
Ratio of population ITN <sup>1</sup> use to population ITN access	0.31	0.76	0.76	1.01	0.52
<b>INTERMITTENT PREVENTIVE MALARIA TREATMENT DURING PREGNANCY</b>					
Percentage of women age 15-49 with a live birth in the 2 years preceding the survey who, during the pregnancy preceding the last birth, received two or more doses of SP/Fansidar	(34.8)	39.9	42.3	54.3	44.8
Percentage of women age 15-49 with a live birth in the 2 years preceding the survey who, during the pregnancy preceding the last birth, received three or more doses of SP/Fansidar	(18.1)	11.5	15.2	30.8	20.9
<b>PREVALENCE, DIAGNOSIS, AND TREATMENT OF CHILDREN WITH FEVER</b>					
Percentage of children under age 5 with fever in the 2 weeks preceding the survey	10.2	18.2	23.8	16.4	12.9
Among children under age 5 with fever in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought <sup>2</sup>	*	81.1	76.2	65.3	*
Among children under age 5 with fever in the 2 weeks preceding the survey, percentage who had blood taken from a finger or heel for testing	*	36.9	22.3	36.6	*
<b>MALARIA PARASITEMIA</b>					
Percentage of children age 6-59 months with a positive rapid diagnostic test (RDT) result	0.0	7.1	6.0	17.3	0.0

<sup>1</sup> An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2010 TDHS, 2011-12 THMIS, and 2015-16 TDHS-MIS, this was known as a long-lasting insecticidal net (LLIN).

<sup>2</sup> Excludes advice or treatment from a traditional practitioner

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Malaria Indicator	Region				
	Kaskazini Unguja	Kusini Unguja	Mjini Magharibi	Kaskazini Pemba	Kusini Pemba
<b>MOSQUITO NETS</b>					
Percentage of households with at least one insecticide-treated net (ITN) <sup>1</sup>	81.5	86.2	72.5	77.8	89.6
Percentage of households with at least one ITN for every two persons who stayed in the household last night <sup>1</sup>	56.4	55.2	28.8	39.4	53.9
Percentage of children under age 5 who slept under an ITN last night <sup>1</sup>	58.4	79.5	61.6	67.6	78.4
Percentage of the de facto household population who could sleep under an ITN <sup>1</sup> if each ITN in the household were used by up to two people (Access)	67.3	76.3	52.1	59.5	76.8
Percentage of population who slept under an ITN <sup>1</sup> last night	61.4	73.3	49.9	59.0	72.0
Ratio of population ITN <sup>1</sup> use to population ITN access	0.91	0.96	0.96	0.99	0.94
<b>INTERMITTENT PREVENTIVE MALARIA TREATMENT DURING PREGNANCY</b>					
Percentage of women age 15-49 with a live birth in the 2 years preceding the survey who, during the pregnancy preceding the last birth, received two or more doses of SP/Fansidar	26.1	(23.3)	21.6	14.5	7.8
Percentage of women age 15-49 with a live birth in the 2 years preceding the survey who, during the pregnancy preceding the last birth, received three or more doses of SP/Fansidar	10.4	(5.6)	7.5	2.5	0.0
<b>PREVALENCE, DIAGNOSIS, AND TREATMENT OF CHILDREN WITH FEVER</b>					
Percentage of children under age 5 with fever in the 2 weeks preceding the survey	5.6	8.5	11.3	16.0	33.8
Among children under age 5 with fever in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought <sup>2</sup>	*	*	*	(68.7)	(84.2)
Among children under age 5 with fever in the 2 weeks preceding the survey, percentage who had blood taken from a finger or heel for testing	*	*	*	(19.8)	(21.8)
<b>MALARIA PARASITEMIA</b>					
Percentage of children age 6-59 months with a positive rapid diagnostic test (RDT) result	0.0	0.0	0.6	0.0	0.0

<sup>1</sup> An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2010 TDHS, 2011-12 THMIS, and 2015-16 TDHS-MIS, this was known as a long-lasting insecticidal net (LLIN).

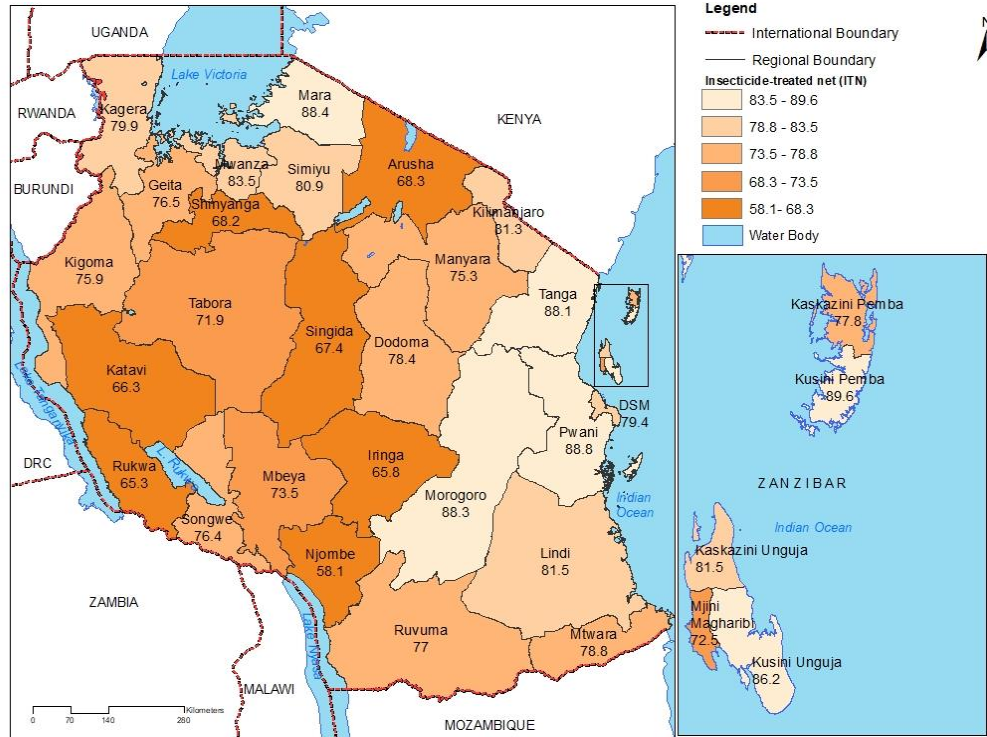
<sup>2</sup> Excludes advice or treatment from a traditional practitioner

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

# Ownership of an Insecticide-Treated Net (ITN) by Region

**Tanzania**  
**77.9%**

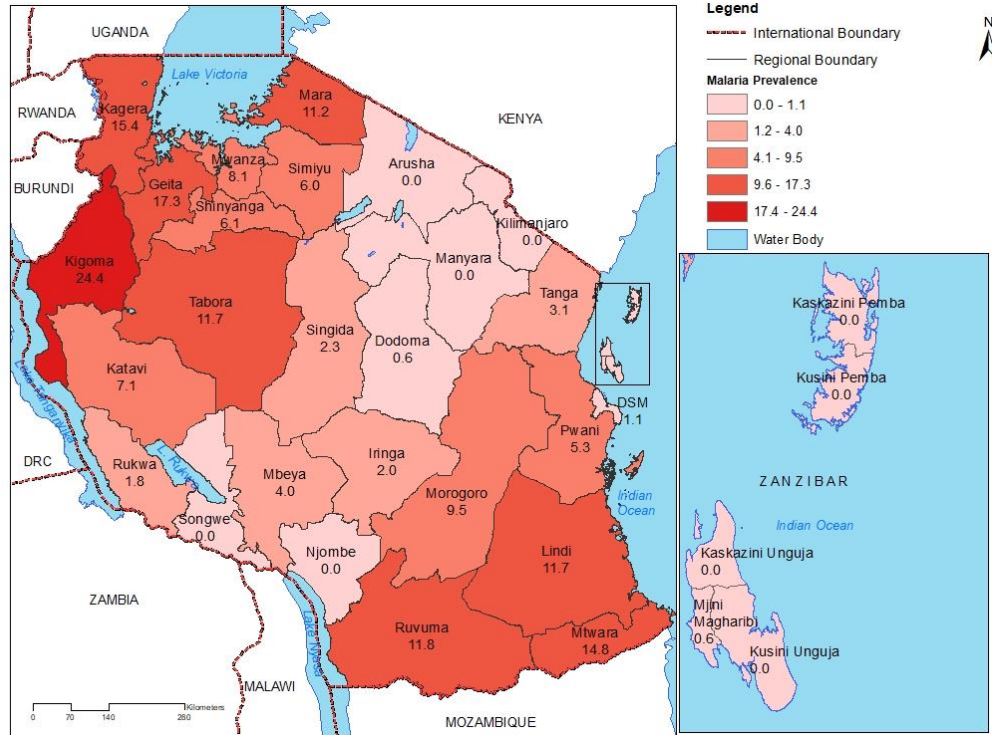
*Percentage of households with at least one insecticide-treated net (ITN)*



# Malaria Prevalence by Region

**Tanzania**  
**7.3%**

*Percentage of children age 6-59 months with a positive rapid diagnostic test (RDT) result*



# Children Who Slept under an ITN by Region

**Tanzania**  
**54.6%**

*Percentage of children under age 5 who slept under an ITN last night*

