

ZIKA OMNIBUS - REGIONAL REPORT-

Guatemala, El Salvador, Honduras and the
Dominican Republic.

(2017 – 2019)



INTRODUCTION

The “Consultoría Interdisciplinaria en Desarrollo S. A.” -CID / Gallup- at the request of the Pan American Social Marketing Organization (PASMO), conducted a study in El Salvador, Honduras, Guatemala and the Dominican Republic on knowledge and behavior regarding the Zika virus.

To achieve the objectives, from January 3rd to February 19th, 2019, a total of 5,256 respondents aged 18 years and over were interviewed - one person per household. The total results have a margin of error equal to ± 2.8 points (confidence level 95%), which means that if the entire population had been interviewed, the values would not have varied more than the margin written here.

After data collection, the information was processed to obtain the results that are exposed in this document.

METHODOLOGY



- **Study:** Quantitative



- **Respondent:** Residents of each country above 17 years of age.



- **Sampling:** Random and representative of each country.



- **Sample size:** 5,256.
 - Guatemala: 1,207
 - El Salvador: 1,607
 - Honduras: 1,224
 - Dominican Republic: 1,218



- **Sampling error:** ± 1.35 points ($p=0.5, z=1.64$)



- **Field work dates:**
 - Guatemala: January the 24th – February the 2nd.
 - El Salvador: January the 3rd - February the 11th.
 - Honduras: January the 7th – February the 19th.
 - Dominican Republic: January the 8th – February the 14th.



- **Questioneir:** Structured, about 25 minutes of lenth.



- **Coverage:** All the territory of each country.

a/the base (n) for all the tables and graphs is 5,256, otherwise, it is indicated.

b/Due to aproximation, total addition of percentages could be 99 or 101.

Sources: anexes and statistical tables.

DEMOGRAPHICS

Sample characteristics
-Percentages.

		Total	Guatemala	El Salvador	Honduras	Dominican Republic
Sex:	Male	49%	49%	48%	50%	49%
	Female	51%	51%	52%	50%	51%
Age:	18 a 24 years	21%	28%	16%	24%	20%
	25 a 39 years	36%	38%	32%	38%	36%
	40 plus	43%	34%	52%	38%	45%
Education:	Elementary	56%	54%	65%	63%	40%
	High School	32%	38%	24%	29%	40%
	Higher	11%	8%	11%	8%	20%
	Base (n)	5,256	1,207	1,607	1,224	1,218

REGIONS

Sample characteristics
-Percentages.



Regions	100
Metro	20
Other cities	25
Rest	55
Base (n):	1207



Regions	100
Metro	26%
Other cities	29%
Rest	45%
Base (n):	1607



Regions	100
Metro	14%
San Pedro Sula	8%
Other cities	19%
Rest	60%
Base:	1224



Regions	100
Santo Domingo	36%
Other cities	30%
Rest	34%
Base:	1218



Graphic Interpretation

MEDIA

↑↓ significant differences to 95%

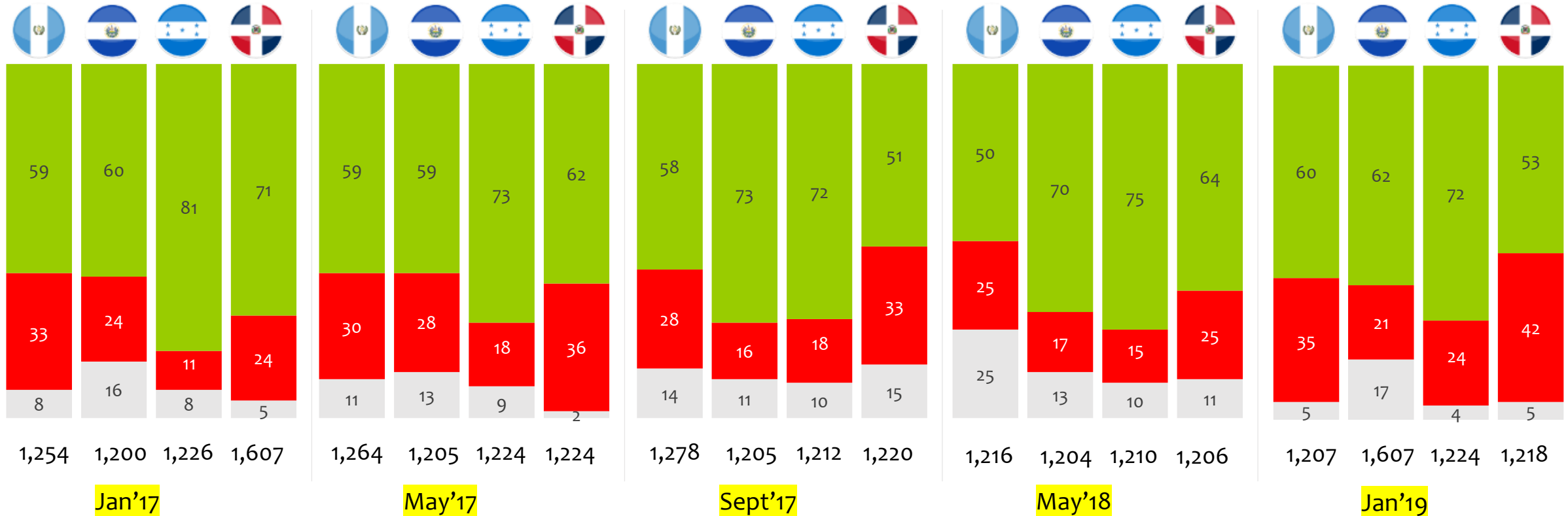
¿Where have you heard about Zika in the last month? –RM-
-Percentages.

	Total	Guatemala	El Salvador	Honduras	R. Dominicana
TV	30	28	28	36 ↑	27
MOH personnel	16	16	21 ↑	20 ↑	6
Radio	11	10	8	15 ↑	11
NGO community promoters	3	2	1	7	3
Have not heard about Zika in the last month	34	40	23	30	48 ↑
Other	13	12	12	13	14
Do not know	9	5	18	4	5
No response	1		1		
	5,256	1,207	1,607	1,224	1,218

People in all 4 countries have heard about Zika mainly through TV, MOH personnel and Radio, in this other, but a great proportion, specially in Dominican Republic and Guatemala, has nor heard about Zika during the month prior to the survey.

■ Has heard ■ Has not heard ■ Do not know

¿Has heard about Zika?-UA-
Percentages.



In Guatemala, the proportion of its adult population, which has heard about Zika, increased 10% from the last survey (May'18). In the Dominican Republic, El Salvador and Honduras, the proportion of their adult population, which have heard about Zika, decreased from the last survey (May'18); specially in the Dominican Republic (11%).

Main message about Zika

↑↓significant differences to 95%

What have you heard about Zika in those message?

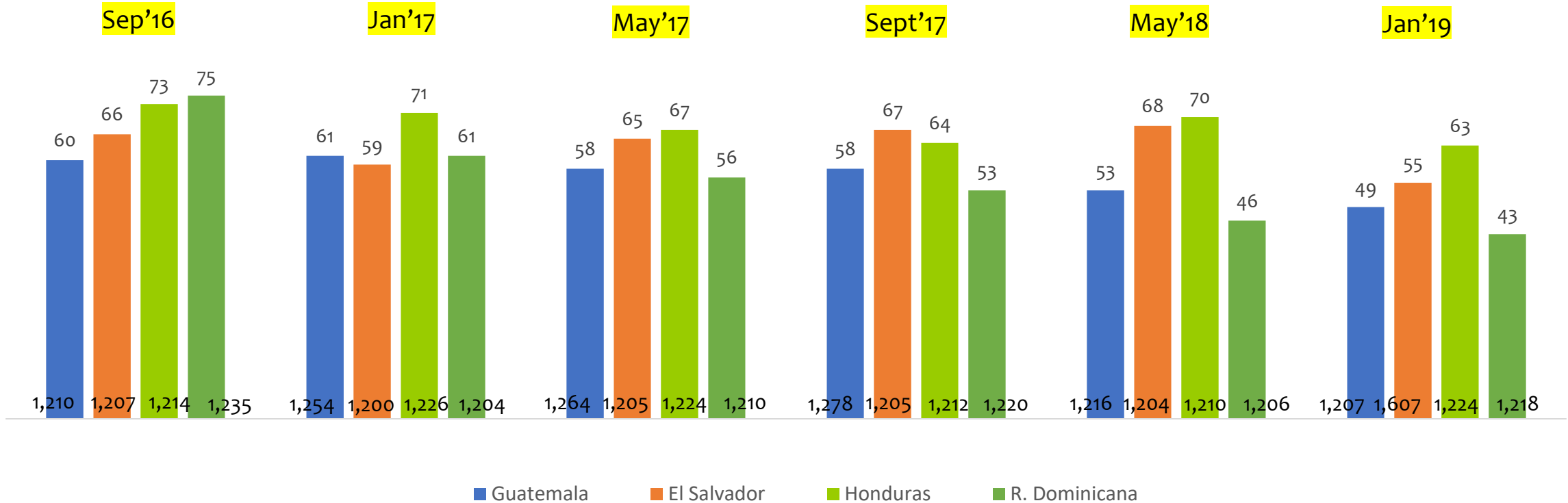
-Percentages-

	Total	Guatemala	El Salvador	Honduras	Dominican R.
Deadly disease	22	12	22	25	29 ↑
Prevention	20	16	16	33 ↑	12
It is transmitted by mosquitoes	17	23 ↑	15	18	12
Damage to pregnant women	9	8	13 ↑	9	3
Viral disease	9	15	5	5	13
Symptoms	7	7	8	4	9
Sexually transmitted disease	4	5	4	4	1
Other	7	6	7	5	9
Do not know / No response	14	16	16	7	16
	n=3,217	n=661	n=1068	n=858	n=630

In Honduras the main message was about prevention, in Guatemala was about vertical transmission of the virus, in El Salvador and Dominican Republic was relating Zika with a deadly disease.

RISKS

Do you think you can acquire Zika in your neighborhood or community?
-Percentages.



Risk perception, in Dominican Republic, keeps decreasing, and have reach its lowest level (the same situation in Guatemala). El Salvador and Honduras show a decrease from the last survey (May'18); 13% and 7%, respectively.

FORMS OF TRANSMISSION

↑↓significant differences to 95%

How Zika is transmitted?
-Percentages.

	Total	Guatemala	El Salvador	Honduras	R. Dominicana
Mosquitoes bites	52	49	50	74 ↑	37
Sexually transmitted	12	11	12	16 ↑	9
From the mother to the baby during pregnancy	1		1	2	
Incorrect answers*	10	6	4	12	17 ↑
Others	2		2	3	3
Do not know	37	43	39	19	47
No response	1		2		
	5,256	1,207	1,607	1,224	1,218

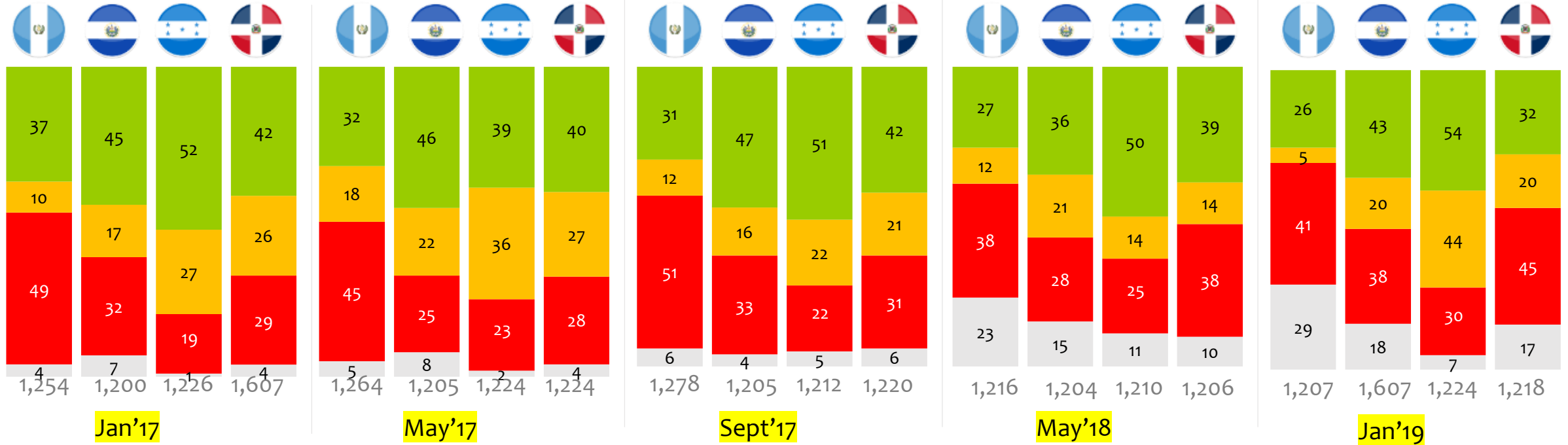
In all 4 countries, mosquitoes bites were the most mentioned in this survey. The second most mentioned was sexually transmitted, and a considerable proportion of the population, in Guatemala, El Salvador and Dominican Republic, did not know any way of transmission.

*Incorrect answers: by contaminated water, direct contact with other person and by touching another person.

COMPARATIVE-PREVENTION

Comparative - 2016-2019 Have you taken any measure or done anything to prevent Zika?

-Percentages.



- Taking correct measures*
- Taking incorrect measures**
- Not taking any measures
- Do not know

In the Dominican Republic there is a decrease in the taking of correct measures to prevent Zika. In the countries of El Salvador and Honduras an increase is reported, while in Guatemala the percentage of taking correct measures is maintained.

*Correct responses: Using repellent, using condom, not having sex, fumigation, eliminating standing water, putting screens on doors and windows.

**Incorrect responses: Using bracelets, cleaning the house, putting chlorine in the water.

PREVENTION

Have you taken any measure or done anything to prevent Zika?

-Percentages.

↑↓ significant differences to 95%

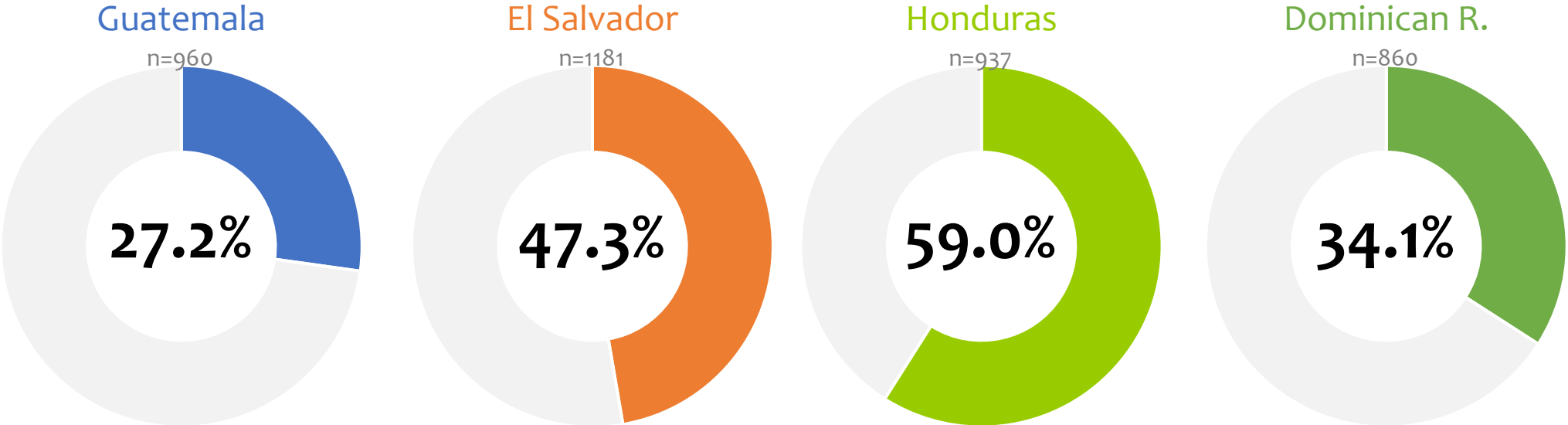
	Total	Guatemala	El Salvador	Honduras	Dominican R.
Eliminating stagnant water	22	16	23	31 ↑	16
Fumigation	7	4	8	12	4
Repellent use	4	2	3	4	6
Mosquito nets, screens	3	2	4	2	2
Insecticide	2	1	2	3	1
Condom use	1		1	1	2
Sexual abstention	1		1	1	
Not taking any measure	38	41	38	30	45 ↑
Incorrect responses*	22	5	20	44	20
Other	2	4	2	2	2
Do not know	16	27	15	6	16
No response	1 5,256	1 1,207	3 1,607	1,224	1 1,218

*Incorrect responses: Hygiene, putting chlorine in the water,

In all 4 countries, the main measure implemented is the elimination of stagnant water. The people in Honduras are the ones who take the most correct measures to prevent Zika. In the Dominican Republic, most people do not take action

PREVENTION

Individuals of reproductive age who have taken at least one effective measure in the last month to prevent Zika



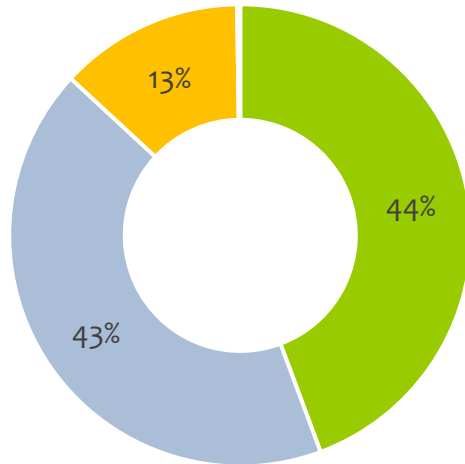
Hondurans are the ones who have taken the most effective action to prevent Zika. The opposite occurs in Guatemala where the lowest percentage of correct preventive actions is presented.

KNOWLEDGE – ZIKA PREVENTION

How can Zika be prevented?

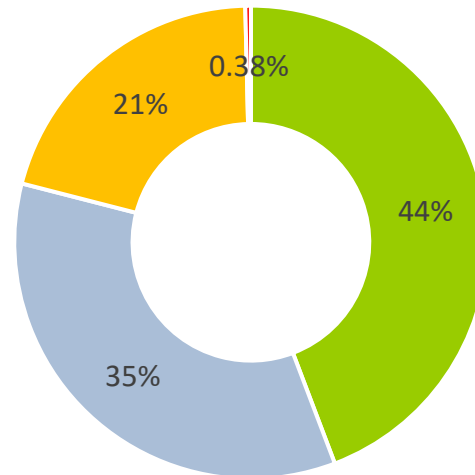
Guatemala

n=1,207



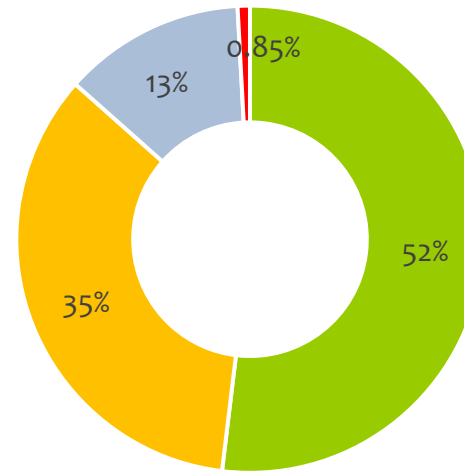
El Salvador

n=1,577



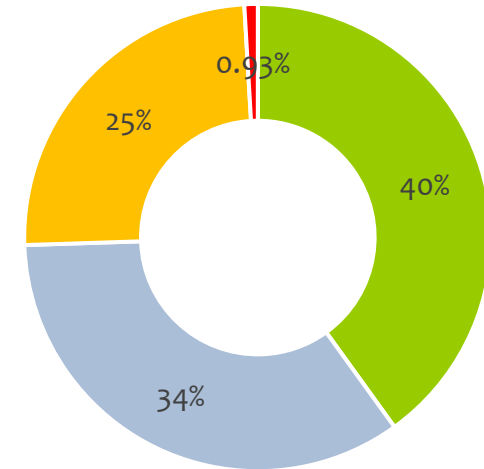
Honduras

n=1,211



Dominican R.

n=1,218



- At least one correct measure
- Incorrect measures
- No way to prevent it
- Do not know

Hondurans are the ones who handle the most accurate information about Zika prevention, while Guatemalans know the least about Zika prevention. On the other hand, Dominicans are the ones who least take effective measures

KNOWLEDGE – ZIKA PREVENTION

How can Zika be prevented?

↑↓ significant differences to 95%

	Total	Guatemala	El Salvador	Honduras	Dominican R.
Eliminating stagnant water	31	28	30	46 ↑	22
Fumigation	11	8	10	16	9
Repellent use	6	5	4	7	7
Condom use	4	3	4	4	5
Mosquito nets, screens	3	2	4	2	3
Sexual abstention	2	2		2	1
Insecticide	2	2	1	3	1
Incorrect responses**	31		26	54	31
No way to prevent it	1			1	1
Other	2	5		1	2
Do not know / No response	39	49 ↑	44	20	43 ↑
	5,213	1,207	1,577	1,211	1,218

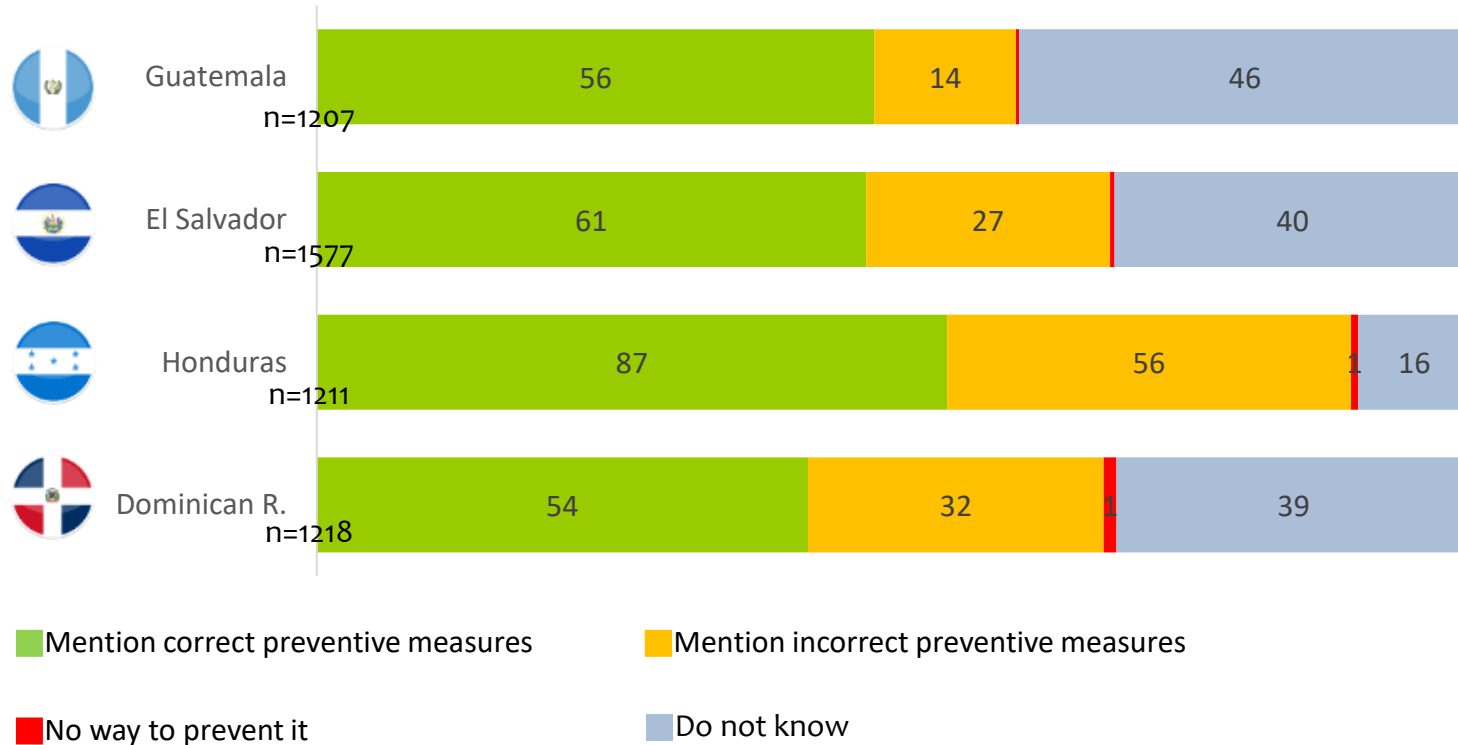
**Incorrect responses: Hygiene, cleaning the house, tearing trash, vaccination, putting chlorine in the water.

In Honduras, the ways to prevent Zika are most known. For example, mentioning the elimination of standing water is more frequent in this country. Unlike Guatemala and the Dominican Republic, where less are known about the prevention of Zika

KNOWLEDGE – ZIKA PREVENTION

REPRODUCTIVE AGE (18 a 49 YEARS)

How can Zika be prevented?



When taking into account people of reproductive age, it is also the Hondurans who most mention correct preventive measures. Guatemala, once again, has the least knowledge about preventive measures in the region.

KNOWLEDGE – ZIKA PREVENTION

REPRODUCTIVE AGE (18 a 49 YEARS)

Women of reproductive age who identify at least one preventive measure of sexual transmission of Zika *			
Guatemala	El Salvador	Honduras	DR
6.0%	5.6%	5.9%	5.2%
n=513	n=583	n=459	n=447

Individuals of reproductive age that mention at least one preventive measure of Zika vector transmission**			
Guatemala	El Salvador	Honduras	DR
50.9%	54.3%	81.3%	47.2%
n=960	n=1165	n=926	n=860

Individuals of reproductive age who can mention at least one preventive measure of sexual transmission of Zika*			
Guatemala	El Salvador	Honduras	R. Dominicana
5.3%	6.8%	5.7%	6.5%
n=960	n=1165	n=926	n=860

*Preventive measures of sexual transmission: Condom use, not having sex.

**Measures against vector transmission: Repellant use, fumigation, spiral use, elimination of standing water, mosquito net use, screens, protective clothing.

Vector preventive methods are better known in Honduras. In Guatemala, the knowledge of women of reproductive age on sexual transmission of Zika stands out. El Salvador is where, individuals of reproductive age, most know about the sexual prevention of Zika

SYMPTOMS

What are the symptoms of Zika? –MR- Percentages.

↑↓significant differences to 95%

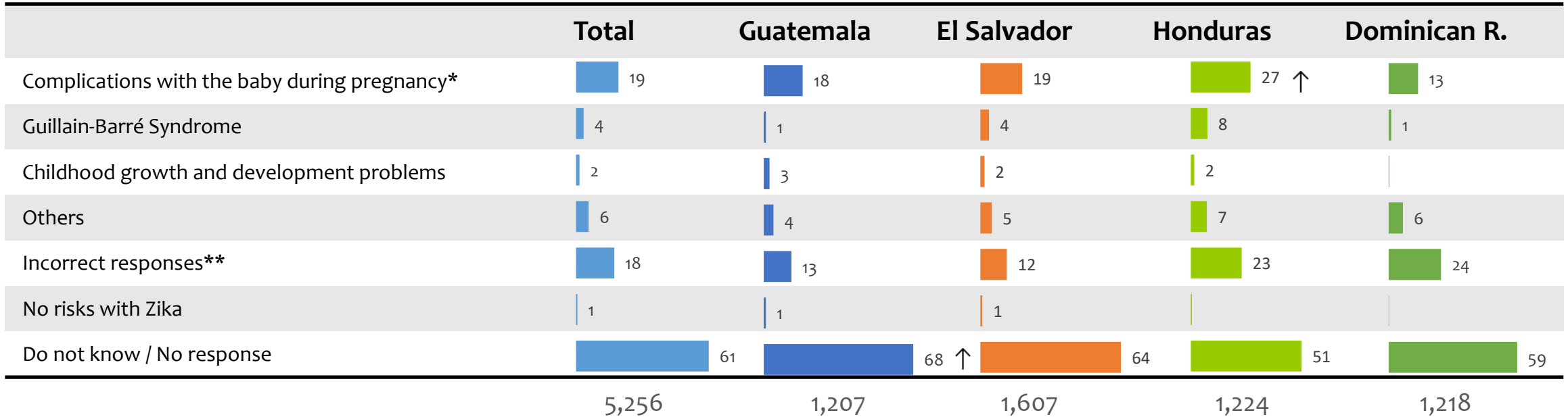
	Total	Guatemala	El Salvador	Honduras	Dominican R.
Fiber	49	44	46	64 ↑	43
Headache	39	32	37	57	33
Rash	7	4	8	12	5
Conjunctivitis	2	1	2	4	1
Do not present symptoms	.2	.1	.1	.4	.0
Other	2	2	2	2	1
Incorrect responses*	45	41	31	59 ↑	55 ↑
Do not know / No response	41	48	45	27	44
	5,256	1,207	1,607	1,224	1,218

In Honduras there is greater knowledge of the symptoms, but also in Honduras, and the Dominican Republic, there are more incorrect answers. In Guatemala is where people have less knowledge about the symptoms of Zika.

*Incorrect responses: Weight loss, bleeding, pain behind the eyes.

ZIKA RISKS

What risks are associated with Zika? -Percentages.



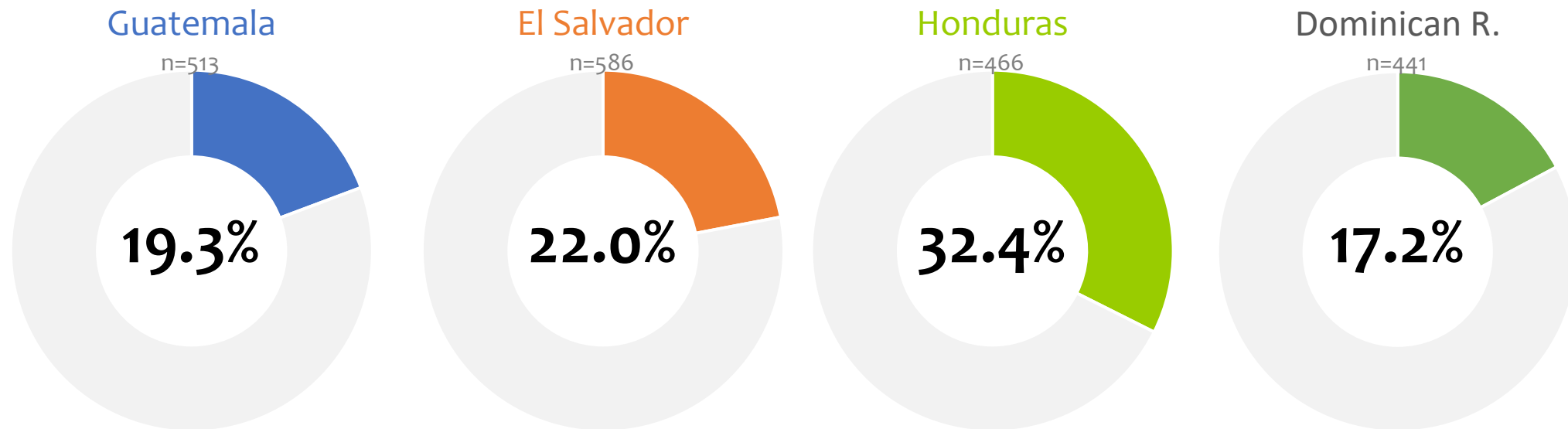
The risks associated with complications in pregnancy and Guillain-Barré are more recognized in Honduras than in other countries. Once again, in Guatemala there is less knowledge about the risks associated with Zika; followed by El Salvador.

*Complications with the baby during pregnancy: The baby inside the womb cannot develop properly, there is a risk of a miscarriage, the baby can be born prematurely, the baby can be born with some disability, the baby can present malformations of microcephaly.

**Incorrect responses: Morality of the person who has Zika

RIESGOS DEL VIRUS

Women in reproductive age who identify potential risks of Zika during pregnancy



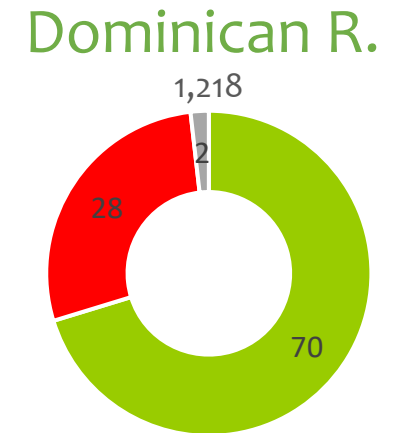
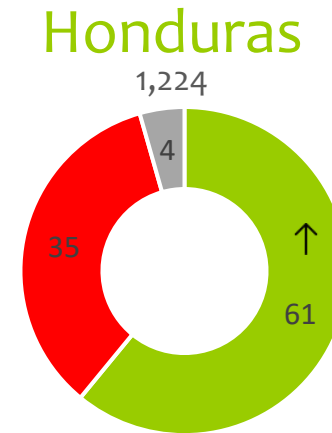
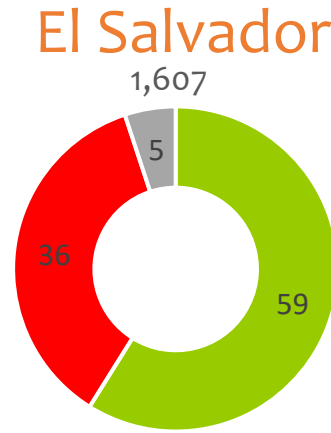
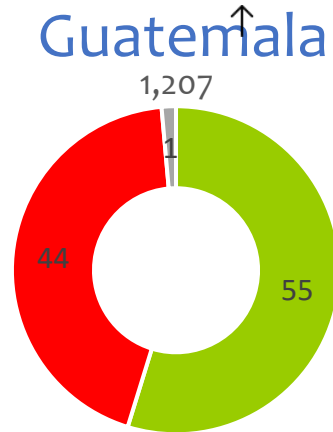
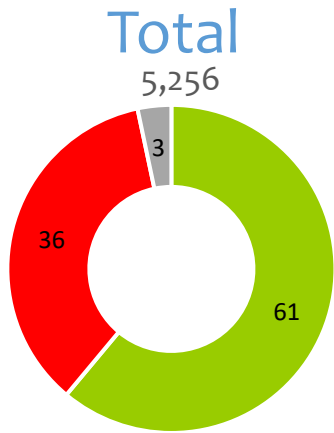
At a general level, the proportion of women who identify potential Zika risks during pregnancy ranges from 20% to 30%. However, it is in Honduras where there is greater knowledge. In Guatemala and the Dominican Republic, the lowest mentions in the area are maintained.

SEXUALITY

■ Yes
■ No
■ Do not know

Are you sexually active? -Percentages

↑↓ significant differences to 95%



In the Dominican Republic there are more sexually active people. The opposite happens in Guatemala, where there are 15% fewer sexually active citizens compared to the Dominican Republic.

Yes: 61%

	%	n
Male	65	588
Female	45	619
18-24	45	337
25-39	62	456
40 and plus	55	414
Urban	55	496
Rural	55	711

Yes: 59%

	%	n
Male	74	614
Female	45	395
18-24	58	183
25-39	73	437
40 and plus	51	389
Urban	60	669
Rural	57	340

Yes: 61%

	%	n
Male	74	455
Female	48	291
18-24	54	160
25-39	72	334
40 and plus	55	252
Urban	62	355
Rural	60	391

Yes: 70%

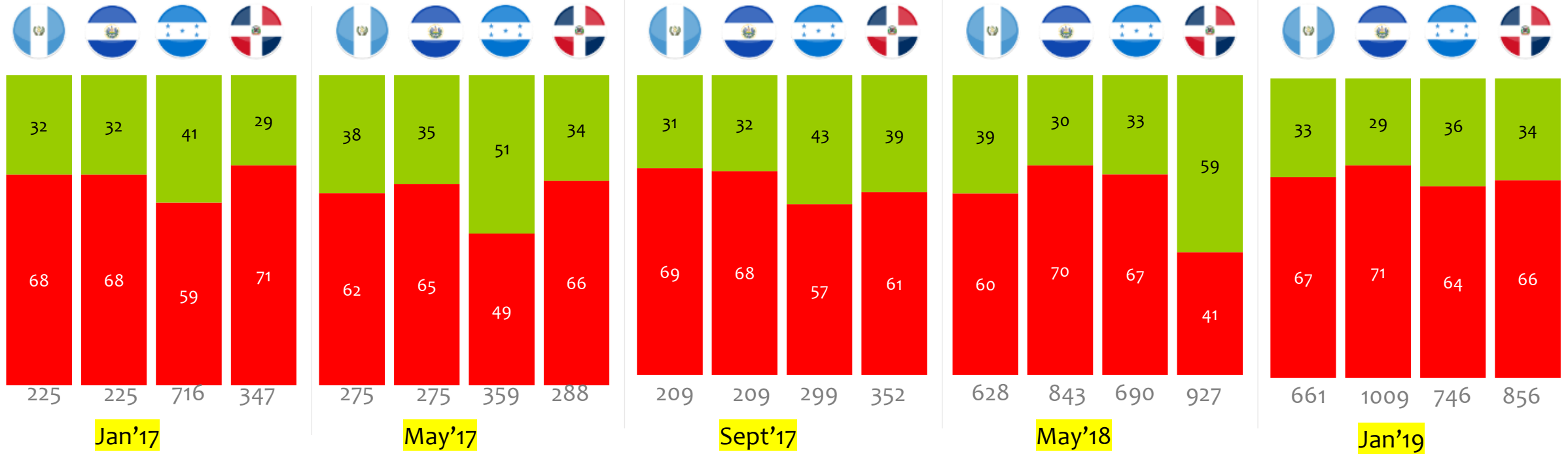
	%	n
Male	80	484
Female	60	372
18-24	73	174
25-39	79	342
40 and plus	63	340
Urban	71	657
Rural	68	199

CONTRACEPTION

- Use a contraceptive method
- Does not use a contraceptive method

Comparative 2016-2018 – Are you currently using any contraceptive method?

-Percentages-



Only in Honduras there is a slight increase in the use of contraceptive methods, it is precisely in this country where they are most used, at least in this measurement. In the Dominican Republic there is an important decrease in this type of practice.

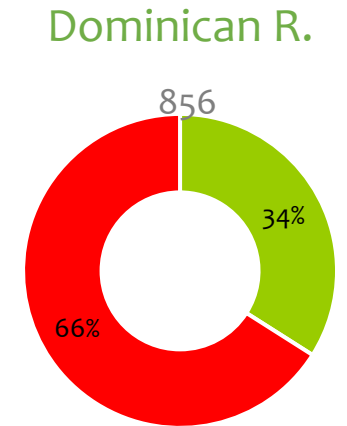
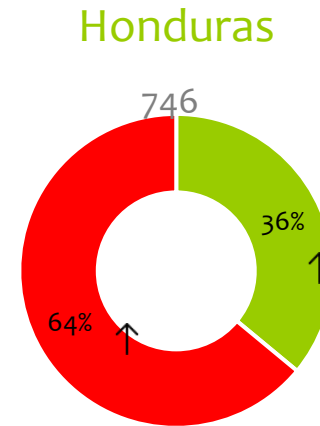
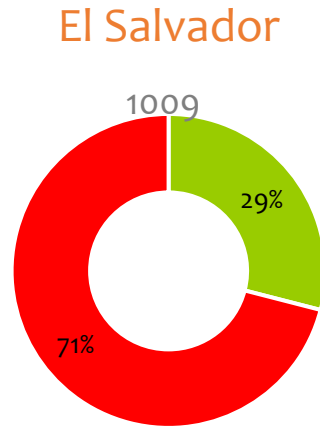
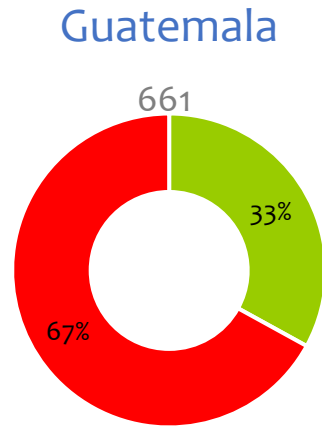
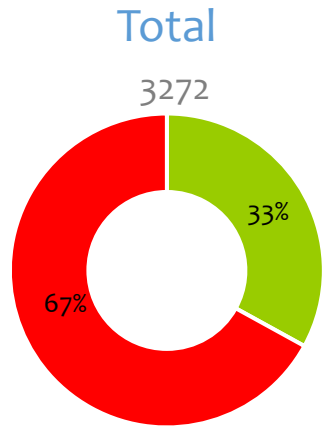
CONTRACEPTION

■ Yes
■ No

Are you currently using a contraceptive method?

↑↓ significant differences to 95%

-Percentages-



The use of contraceptive methods is lower in El Salvador and Honduras. On the contrary, in the Dominican Republic and Honduras, the use of these methods is greater in comparison with the rest of the countries.

Yes: 39%

	%	n
Male	30	383
Female	37	278
18-24	55	153
25-39	37	282
40 and plus	12	226
Urban	32	272
Rural	33	389

Yes: 30%

	%	n
Male	28	614
Female	30	395
18-24	61	183
25-39	34	437
40 and plus	14	389
Urban	27	669
Rural	33	340

Yes: 33%

	%	n
Male	34	455
Female	39	291
18-24	53	160
25-39	38	334
40 and plus	23	252
Urban	34	355
Rural	38	391

Yes: 59%

	%	n
Male	33	484
Female	34	372
18-24	50	174
25-39	41	342
40 and plus	18	340
Urban	33	657
Rural	36	199

CONTRACEPTION

↑↓significant differences to 95%

Which contraceptive method are you currently using or have used during the last 6 months?

-Percentages-

	Total	Guatemala	El Salvador	Honduras	Dominican R.
Condoms	54	42	59	53	59
Injections	21	36	24	19	10
Pills	12	6	5	12	23
IUD	5	5	7	7	2
Implant	2	4	2		1
Sterilization	2	1	1	5	1
Emergency pills	1		1		2
Other	4	7	↑ 3	5	1
	1,104	216	329	271	288

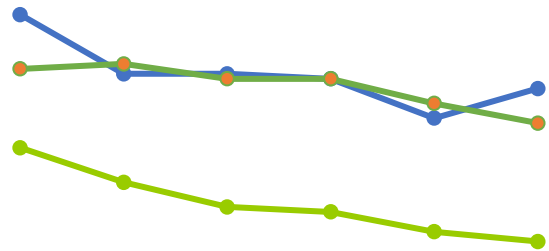
Condom use is highest in the Dominican Republic and El Salvador. The contraceptive pill stands out in the Dominican Republic and the injection in Guatemala.

ZIKA IN THE REGION

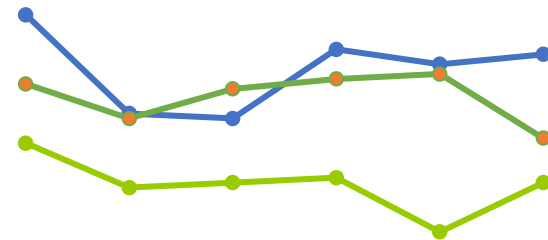
Knowledge, risk perception and Zika prevention

-Percentages-


Guatemala



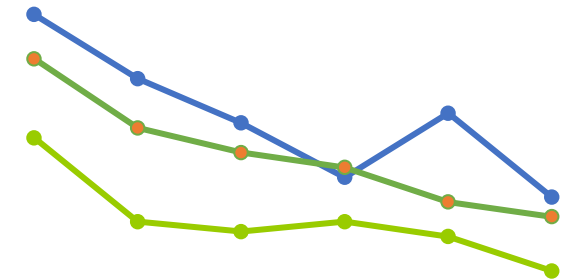

El Salvador




Honduras




Dominican R.



Sep'16 Jan'17 May'17 Sep'17 May'18 Jan'19

71	59	59	58	50	56
60	61	58	58	53	49
44	37	32	31	27	25

Sep'16 Jan'17 May'17 Sep'17 May'18 Jan'19

80	60	59	73	70	72
66	59	65	67	68	55
54	45	46	47	36	46

Sep'16 Jan'17 May'17 Sep'17 May'18 Jan'19

95	81	73	72	75	66
73	71	67	64	70	63
62	52	39	51	50	52

Sep'16 Jan'17 May'17 Sep'17 May'18 Jan'19

84	71	62	51	64	47
75	61	56	53	46	43
59	42	40	42	39	32

- Has heard about Zika
- Risk perception
- Taking effective measures

In El Salvador the arrival of information has increased, as well as the taking of effective preventive measures against Zika. In the Dominican Republic, all the indicators decrease, which is the worst possible scenario. In Honduras they also decrease but to a lesser extent.

MEDICAL CONSULTATION

↑↓significant differences to 95%

When you have fever or rash, where or with whom do you consult first?

-Percentages-

	Total	Guatemala	El Salvador	Honduras	Dominican R.
Health service	32	36	40	41	9
Doctor	31	22	29	29	43
Pharmacy	11	17	10	7	12
Hospital	11	7	9	7	21
Someone you trust	9	12	6	10	9
Self-medicate	3	1	4	3	3
Do not consult	3	3	2	2	3
Other	1	2	↑ 1		
	5,256	1,207	1,607	1,224	1,218

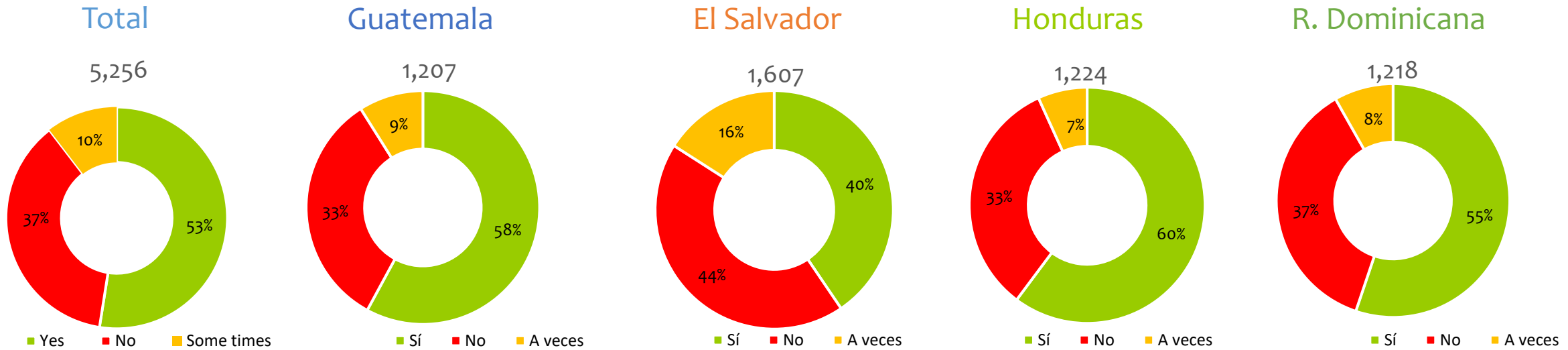
In the case of fever or rash, the health service is the most used in Guatemala, El Salvador and Honduras. In the Dominican Republic they prefer to go to the doctor directly.

MEDICAL CONSULTATION

↑↓ significant differences to 95%

Do you trust the information and recommendations that the pharmacy clerk gives you?

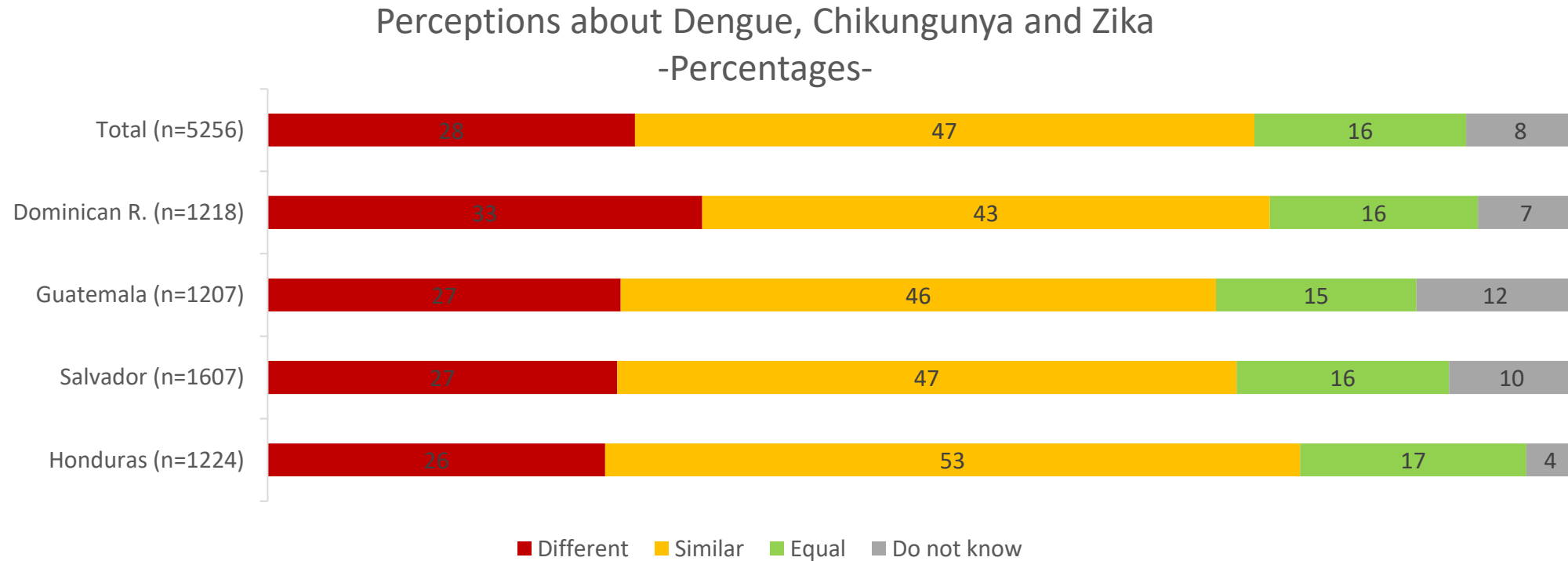
-Percentages-



Guatemalans and Hondurans have the greatest confidence in the information provided by a pharmacy clerk. On the contrary, Salvadorans are more distrustful.

DISEASE PERCEPTION

↑↓ significant differences to 95%



In the Dominican Republic, most often the three diseases, transmitted by mosquitoes, are considered different. In Honduras it is where most are considered that the three are similar. In all four countries, less than 20% consider these three diseases equal.

DISEASE

↑↓significant differences to 95%

Which disease worries you the most?

-Percentages-

Disease	Total	Guatemala	El Salvador	Honduras	Dominican R.
Dengue	34	24	32	24	55
Zika	31	33	30	41	21
Chikungunya	26	26	30	29	19
None	9	16	9	6	6
n	5256	1207	1607	1224	1218

In general, there are a variety of responses regarding concerns about the diseases transmitted by mosquitoes. Dengue is the one that causes most concern, but especially in the Dominican Republic, since in Honduras and Guatemala Zika prevails, and in El Salvador all three diseases have very similar concerns.

Water storage

↑↓significant differences to 95%

To store water, where or what container do you use most often?

-Porcentajes-

Container	Total	Guatemala	El Salvador	Honduras	Dominican R.
Sink	61	50	65	67	61
Cask / Barrel	17	23	16	13	17
Tank	8	15	4	5	8
Bucket	7	6	6	10	7
Bottles	2	1	4	3	2
Pitcher, clay pot or jars	2	1	3	--	1
Other	1	3	1	--	1
Do not store water	1	1	--	1	--
n	5256	1207	1607	1224	1218

The sinks are the most used artifacts to store water, regardless of the country where it is observed. However, in Guatemala there is more use of casks, barrels or tanks.

Conclusions

1. Throughout the successive rounds of survey (Sep´2016 – Jan´2019) has been detected a continuous decline among the population indicating that they have heard information about Zika. And, through time, the main message heard about Zika has been its severity and mortality (which is not accurate).
2. Another trend observed over time, is a decrease in the perception of risk (to acquire the virus), so has decreased the proportion of people implementing preventive measures.
3. The most frequent mentioned form of Zika transmission is mosquitoes bites, on the contrary, a small proportion of the population indicates that it is also transmitted by sex.
4. It is important to continue communicating information about the fact that, in most cases, Zika is asymptomatic and that this disease has potential risks for babies and their development.