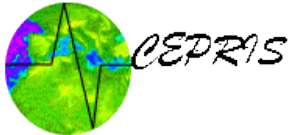


**ACCORD EUROPÉEN ET MÉDITERRANÉEN SUR LES RISQUES MAJEURS
 (EUR-OPA)**

PROJECT – BAYWATCH (CERU + CEPRIS)

**INVOLVING SALES AND TOURISM AGENTS ON EARTHQUAKE AND
 TSUNAMI MITIGATION MEASURES**

	
Centro Europeu de Riscos Urbanos Lisboa - Portugal	Centre Euro-Méditerranéen pour l'Evaluation et la Prévention du Risque Sismique Rabat - Maroc

***WP1 : Testing the tsunami signalling placed on a pilot
 beach in Lagos (Portugal). Questionnaire and analysis
 of the results***

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Introduction

Last year, in the aim of INSPIRED project, also sponsored by the Council of Europe (EUR-OPA Agreement), and in collaboration with Lagos City Council (Portugal), tsunami signalling concerning awareness and evacuation routes, was implemented on an urban beach, Praia da Batata, which is very close to Lagos town centre.

This year, CERU conducted a survey, devoted to resident and non-resident persons, as well as to national and foreign people, performed in the aim of the BAYWATCH project.

The initial objective of this survey was:

- To investigate people knowledge about the tsunami event and its risk
- To study the receptivity of the persons to the tsunami signalling
- To know if the signalling was clear and perceptible to everyone
- To know if the signalling was well placed and visible to the people that were on the beach
- To investigate if informed persons (on tsunami risk) feel more save

During 2016 CERU did the questionnaire to the persons that were in the beach.

Next year, the questionnaire must be implemented on the Lagos Municipality webpage, in order to be filled / answered by a larger number of persons.

In this report we present the questionnaire as well as the statistical analysis of the obtained answers.



QUESTIONNAIRE

1. DESCRIPTION OF THE PARTICIPANT

Q1 AGE < 20 ☐ 21-40 ☐ 41-60 ☐ >60 ☐

Q2 SEX M ☐ F ☐

Q3 QUALIFICATIONS

PRIMARY SCHOOL ☐ HIGH SCHOOL ☐ UNIVERSITY ☐ STUDENT ☐

Q4 RESIDE EM LAGOS ☐ OUTSIDE LAGOS (COUNCIL / COUNTRY) _____

2. SIGNALLING ASSESSMENT AND RISK KNOWLEDGE

Q5 DO YOU KNOW WHAT IS TSUNAMI? YES ☐ NO ☐

Q6 DO YOU KNOW THAT YOU ARE IN A BEACH WHERE A TSUNAMI CAN OCCUR? YES ☐ NO ☐

Q7 DID YOU NOTICE THE INFORMATIVE PANEL THAT IS IN THE BEACH? YES ☐ NO ☐

Q8 IF YES, DO YOU THINK IT IS USEFUL? YES ☐ NO ☐

Q9 DID YOU NOTICE ON THE EVACUATION SIGNS? YES ☐ NO ☐

Q10 IF YES, DO YOU THINK IT IS USEFUL? YES ☐ NO ☐

Q11 IF AN EARTHQUAKE OCCURS WHILE YOU ARE ON THE BEACH:

1. YOU MUST LEAVE THE BEACH IMMEDIATELY ☐
2. YOU MUST WAIT FOR AUTHORITIES INSTRUCTIONS ☐
3. YOU DON'T KNOW WHAT TO DO AND YOU STAY ON THE BEACH ☐

Q12 IF YOU ANSWERED 1:

A. YOU MUST FOLLOW THE INDICATED EVACUATION ROUTE AND WAIT AT THE MEETING POINT ☐

B. YOU MUST LOOK FOR YOUR CAR (TO ABANDON THE BEACH AREA) ☐

C. YOU DON'T KNOW WHERE TO GO ☐

Q13 HAVE YOU SEEN THE EVACUATION ROUTE AND MEETING POINT? YES ☐ NO ☐

Q14 IN GENERAL, DO YOU THINK THAT THESE KIND OF SIGNS ARE USEFUL? YES ☐ NO ☐

☐

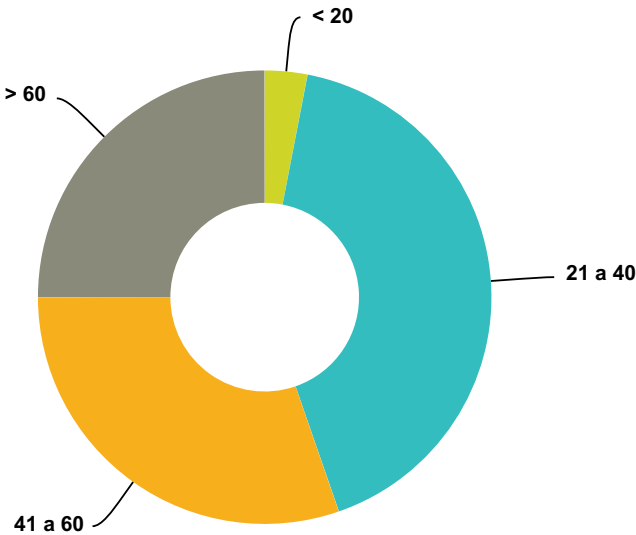
Q15 DO YOU FEEL SAFER FOR BEING INFORMED? YES ☐ NO ☐

Q16 COMMENTS

STATISTICAL ANALYSIS

Q1 Idade

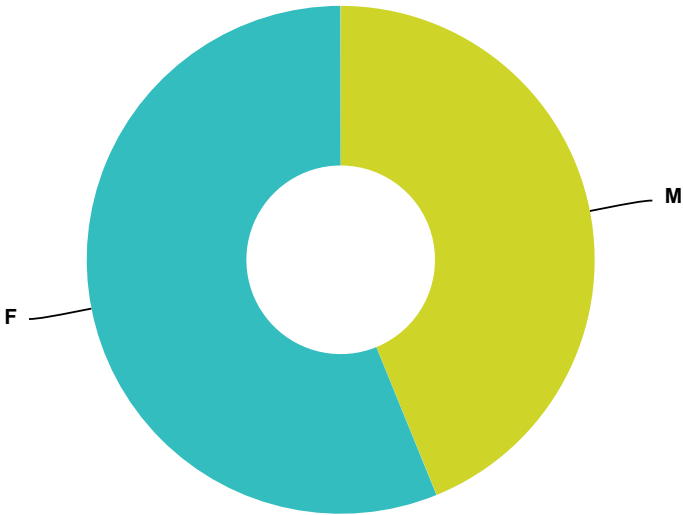
Answered: 132 Skipped: 0



Answer Choices	Responses	
< 20	3.03%	4
21 a 40	41.67%	55
41 a 60	30.30%	40
> 60	25.00%	33
Total		132

Q2 Sexo

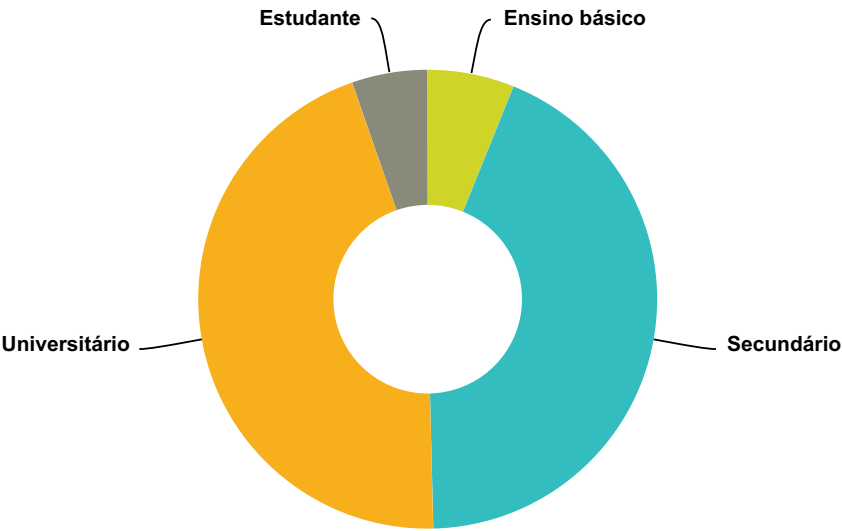
Answered: 130 Skipped: 2



Answer Choices	Responses	
M	43.85%	57
F	56.15%	73
Total		130

Q3 Habilitações Literárias

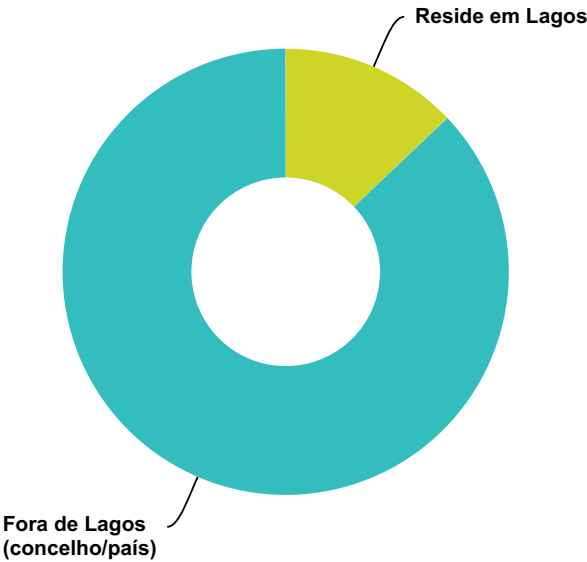
Answered: 131 Skipped: 1



Answer Choices	Responses	
Ensino básico	6.11%	8
Secundário	43.51%	57
Universitário	45.04%	59
Estudante	5.34%	7
Total		131

Q4 Residência

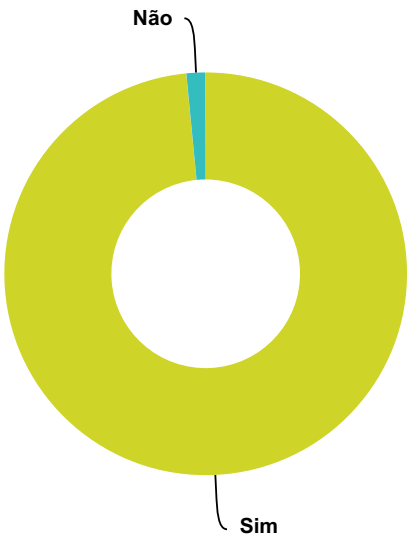
Answered: 124 Skipped: 8



Answer Choices	Responses	
Reside em Lagos	12.90%	16
Fora de Lagos (concelho/país)	87.10%	108
Total		124

Q5 Sabe o que é um tsunami?

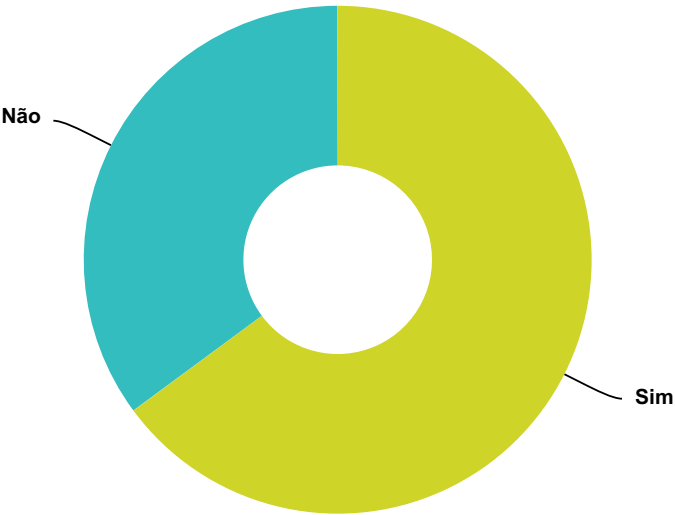
Answered: 131 Skipped: 1



Answer Choices	Responses	
Sim	98.47%	129
Não	1.53%	2
Total		131

Q6 Sabe que está numa praia onde pode ocorrer um tsunami?

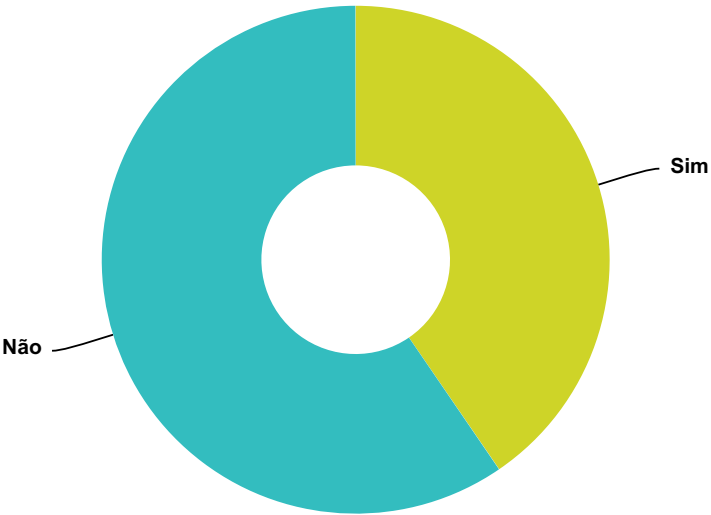
Answered: 131 Skipped: 1



Answer Choices	Responses	
Sim	64.89%	85
Não	35.11%	46
Total		131

Q7 Reparou no placar informativo que está na praia?

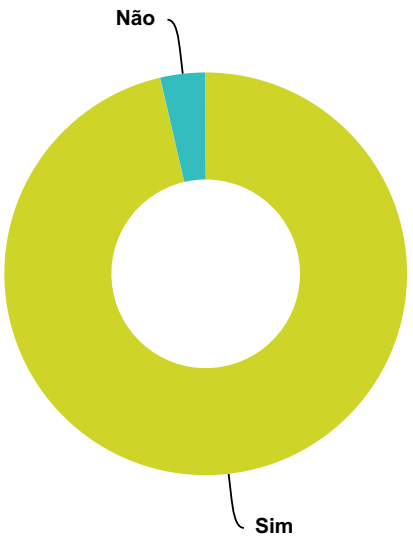
Answered: 131 Skipped: 1



Answer Choices	Responses	
Sim	40.46%	53
Não	59.54%	78
Total		131

Q8 Se sim, acha útil?

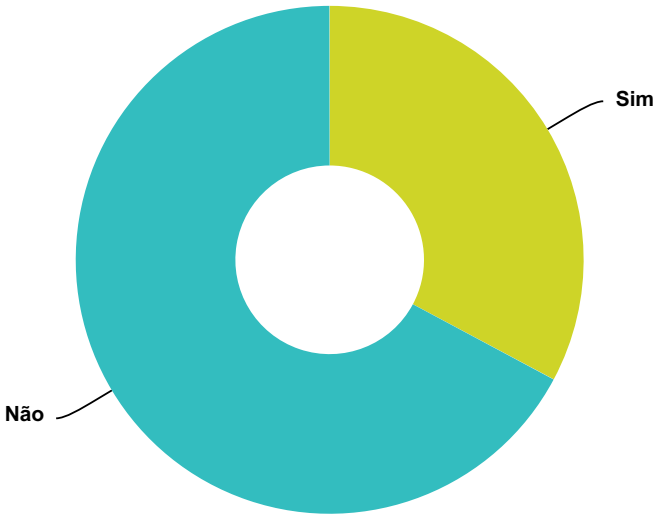
Answered: 55 Skipped: 77



Answer Choices	Responses	
Sim	96.36%	53
Não	3.64%	2
Total		55

Q9 Reparou na sinaletica de evacuacao?

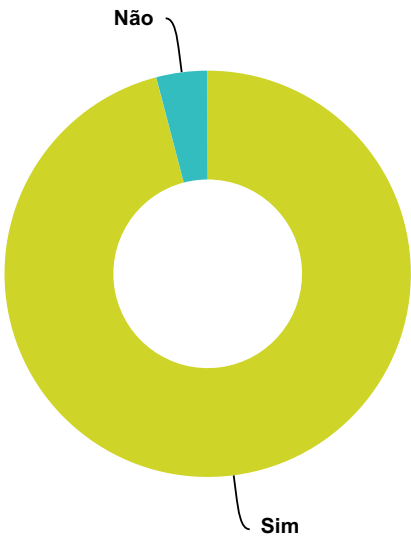
Answered: 128 Skipped: 4



Answer Choices	Responses	
Sim	32.81%	42
Não	67.19%	86
Total		128

Q10 Se sim, acha útil?

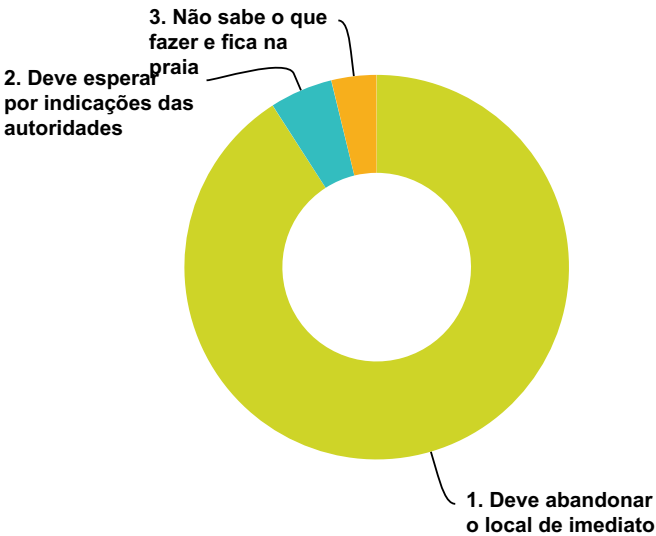
Answered: 49 Skipped: 83



Answer Choices	Responses	
Sim	95.92%	47
Não	4.08%	2
Total		49

Q11 Se ocorrer um sismo enquanto estiver na praia:

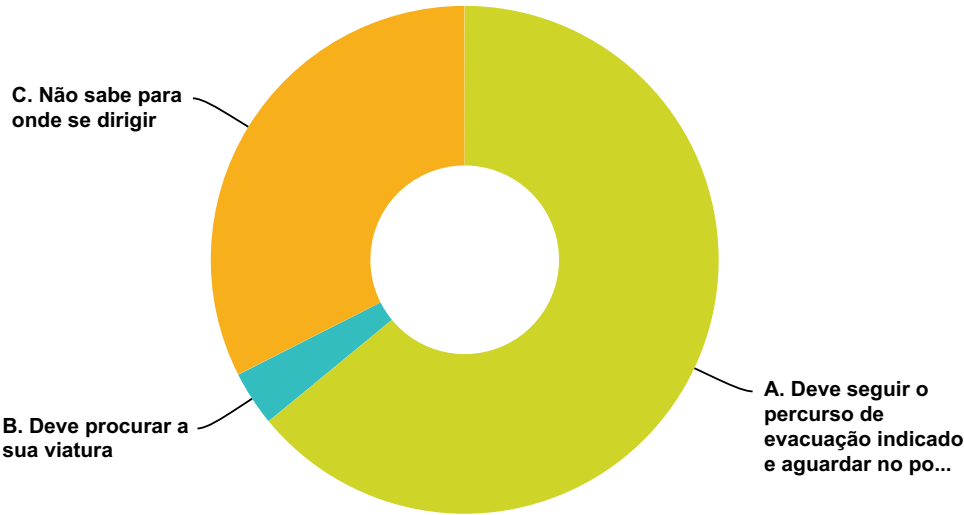
Answered: 132 Skipped: 0



Answer Choices	Responses	
1. Deve abandonar o local de imediato	90.91%	120
2. Deve esperar por indicações das autoridades	5.30%	7
3. Não sabe o que fazer e fica na praia	3.79%	5
Total		132

Q12 Se respondeu 1:

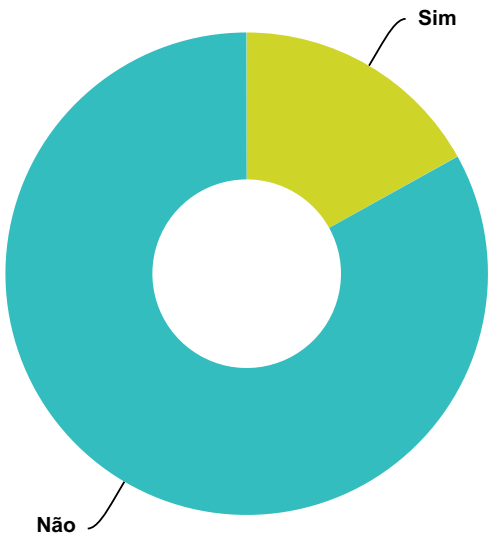
Answered: 114 Skipped: 18



Answer Choices	Responses	
A. Deve seguir o percurso de evacuação indicado e aguardar no ponto de concentração	64.04%	73
B. Deve procurar a sua viatura	3.51%	4
C. Não sabe para onde se dirigir	32.46%	37
Total		114

Q13 Foi ver o percurso de evacuação e local de concentração?

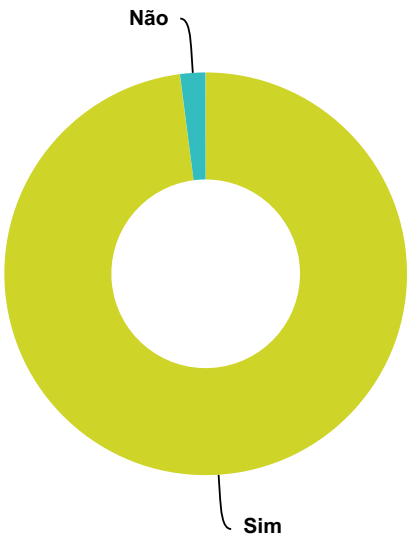
Answered: 130 Skipped: 2



Answer Choices	Responses	
Sim	16.92%	22
Não	83.08%	108
Total		130

Q14 Acha que esta sinaletica é util?

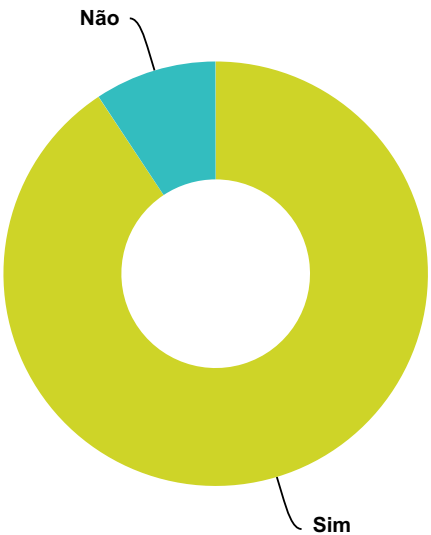
Answered: 98 Skipped: 34



Answer Choices	Responses	
Sim	97.96%	96
Não	2.04%	2
Total		98

Q15 Sente-se mais seguro por estar informado?

Answered: 129 Skipped: 3



Answer Choices	Responses	
Sim	90.70%	117
Não	9.30%	12
Total		129

Q16 Comentários

Answered: 12 Skipped: 120

Q16 COMENTÁRIOS / COMMENTS

Vai ver o percurso de evacuação

Vai ver o percurso de evacuação quando sair da praia

Nadador salvador

Nadador salvador

Vai procurar a informação

Sabe que pode ocorrer um tsunami porque viu os sinais

Sabe que pode ocorrer um tsunami porque viu a sinalética

Sabem que pode ocorrer um tsunami naquela praia porque viram o placar e a sinalética

Sinalética de evacuação mal localizada

Vive 1/2 do ano em Lagos

Pôr a sinalética de evacuação mais visível. Por exemplo, num arco à saída da praia, sobre as escadas (por onde se faz a evacuação)

A sinalética de evacuação devia estar mais visível (de qualquer ponto da praia)

Translation:

- 2 of the inquired persons were beach lifeguards
- 2 of the inquired persons are going to check the evacuation route when they leave
- 1 of the persons said that he/she will look for information later, when leaving the beach
- 3 of the inquired persons said that they know that they are in a beach where a tsunami can occur because they saw the signalling
- 3 of the inquired persons said that the signalling were not much visible and they gave some suggestions to put it in a better place, more visible from different points of the beach and/or at the different beach exit sites
- 1 of the persons said that she lives half of the year in Lagos and other half outside Lagos council.