SURVEY RESULTS

The opinion of people living with a rare disease on newborn screening

A Rare Barometer Survey with the Screen4Care research project

Target population :

- People living with a rare disease
- Family members of those living with a rare disease





DASHBOARD FOR EUROPE



HOW TO USE THIS DASHBOARD

In this dashboard, you will find results for every question of the Rare Barometer survey on the opinion of people living with a rare disease on newborn screening.

Please do not use results of questions for which there are less than 30 respondents.

Please refer to Rare Barometer or add the Rare Barometer logo when using the results.



LANGUAGES

You can change the language at the bottom left of this page, and have access to the questions and modalities as they appeared to respondents in the 24 languages of the survey.

Translation is not available for new variables that were calculated after the questionnaire was closed and for some comments added in this dashboard.



INFORMATION

For more information:

- contact the Rare Barometer team at rare.barometer@eurordis.org
- visit the Rare Barometer website at eurordis.org/voices
- visit our newborn screening-dedicated webpage: <u>eurordis.org/rare-barometer-</u> <u>survey</u>

LIST OF CONTENT

- 1. Sample information
- 2. Respondents' willigness for their rare disease to have been diagnosed at birth
- 3. Respondents' opinion on newborn screening for all rare diseases

MORE ON THE SURVEY

Research questions and in-depth analysis of European results are in the **full report in English**: <u>http://tiny.cc/RB_NBS</u>

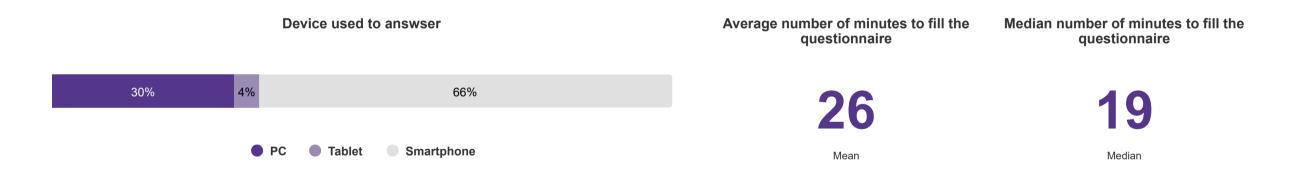
Key results are available in the **factsheets**: <u>http://tiny.cc/RB_NBS</u>

Original questionnaire: tiny.cc/RB NBS questionnaire

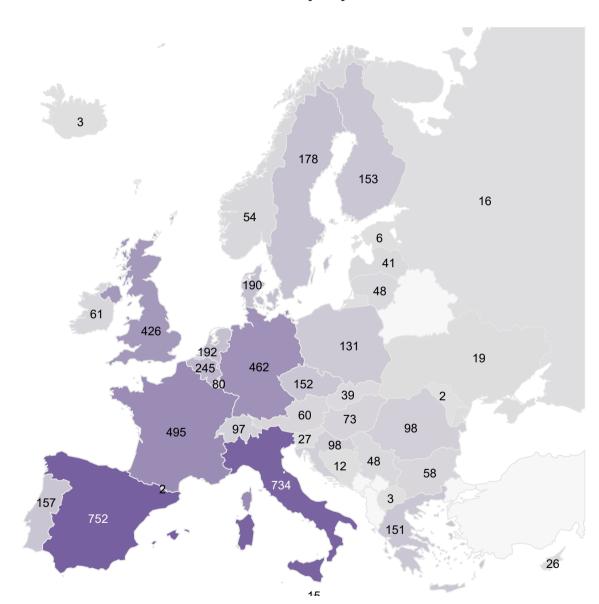


Number of respondents

5,569



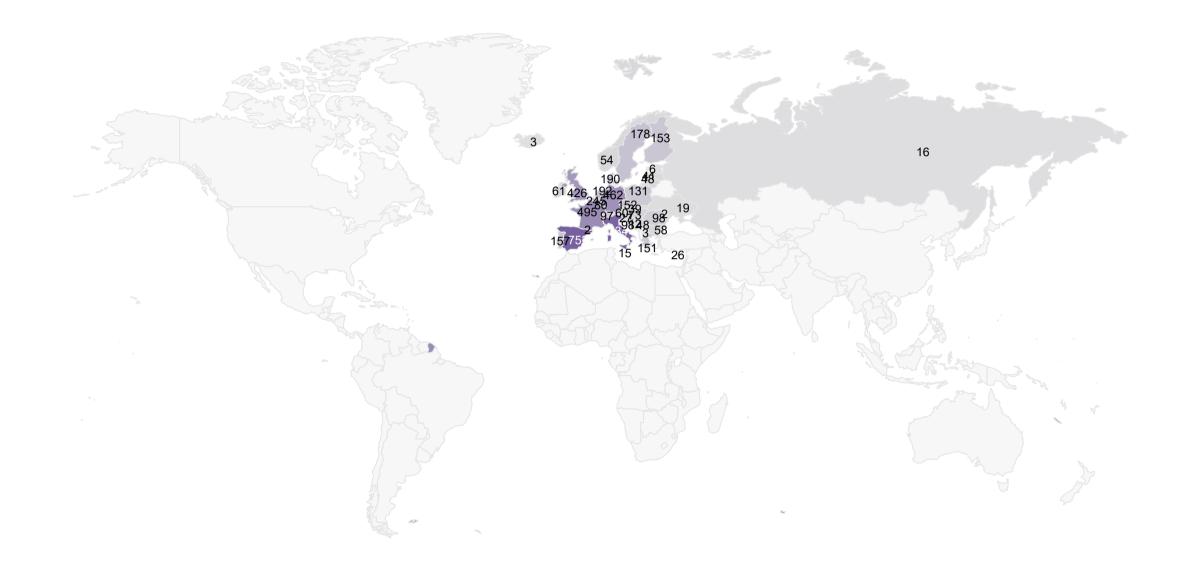




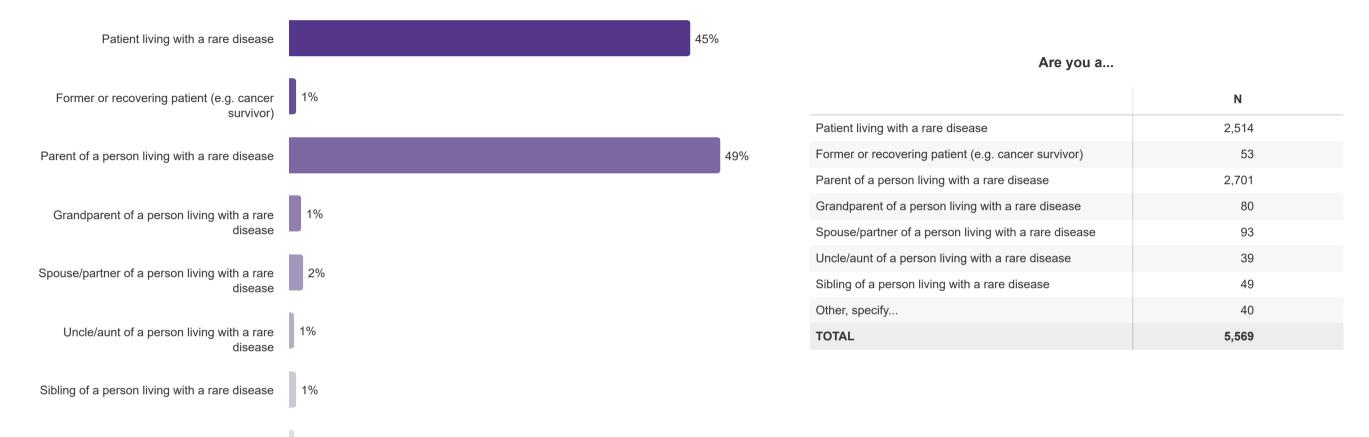
In which country do you live?



In which country do you live?





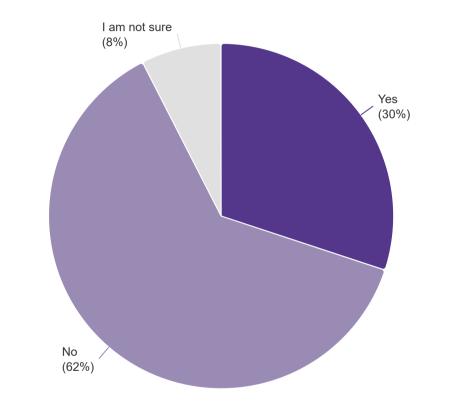


Are you a...

Other, specify...

1%



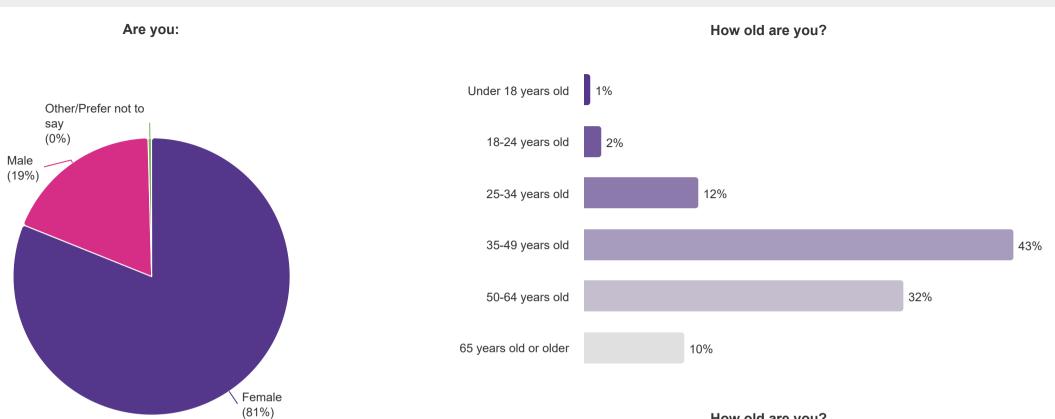


Are you also a patient representative, i.e., involved in voluntary and/or policy activities to support the cause of rare diseases?

Are you also a patient representative, i.e., involved in voluntary and/or policy activities to support the cause of rare diseases?

	Ν
Yes	1,675
No	3,475
I am not sure	419
TOTAL	5,569



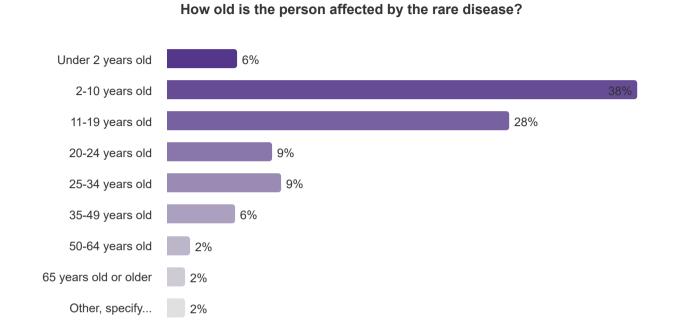


How old are you?

	Are you:
	Ν
Female	4,235
Male	967
Other/Prefer not to say	21
TOTAL	5,223

	Ν	
Under 18 years old	35	
18-24 years old	92	
25-34 years old	590	
35-49 years old	2,206	
50-64 years old	1,640	
65 years old or older	518	
TOTAL	5,081	

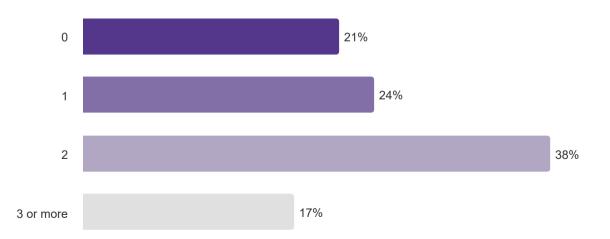




How old is the person affected by the rare disease?

	Ν	
Under 2 years old	157	
2-10 years old	1,040	
11-19 years old	758	
20-24 years old	235	
25-34 years old	255	
35-49 years old	152	
50-64 years old	53	
65 years old or older	41	
Other, specify	42	
TOTAL	2,733	

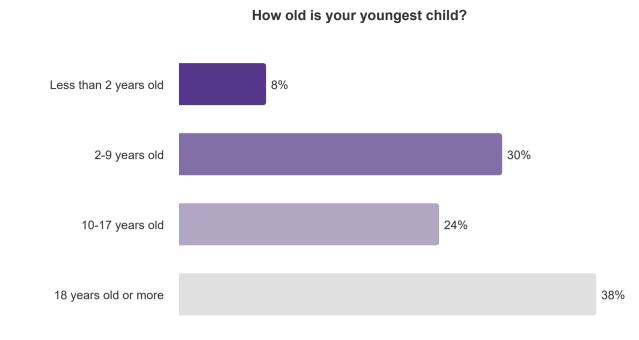
How many children do you have?



How many children do you have?

	Ν
	1,059
1	1,203
2	1,932
3 or more	876
TOTAL	5,070

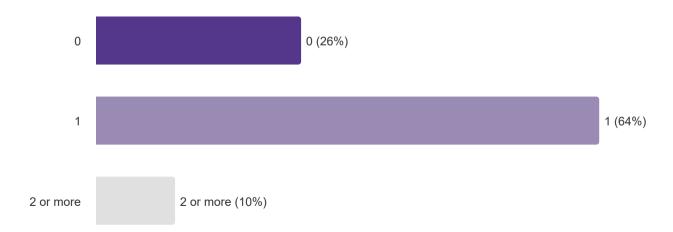




	Ν
Less than 2 years old	324
2-9 years old	1,189
10-17 years old	959
18 years old or more	1,538
TOTAL	4,010

How old is your youngest child?

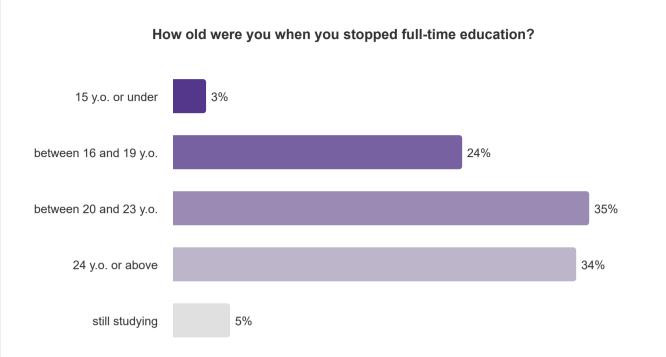
How many children affected by a rare disease do you have?



How many children affected by a rare disease do you have?

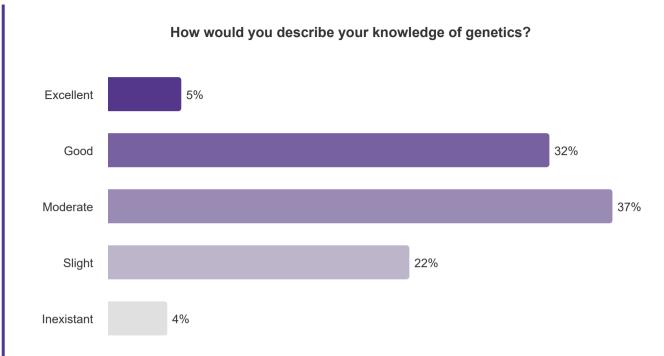
	Ν
	1,045
1	2,560
2 or more	405
TOTAL	4,010





How old were you when you stopped full-time education?

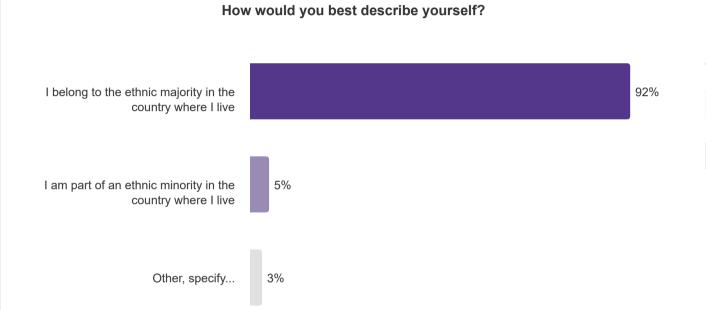
	Ν
15 y.o. or under	142
between 16 and 19 y.o.	1,222
between 20 and 23 y.o.	1,757
24 y.o. or above	1,699
still studying	243
TOTAL	5,063



How would you describe your knowledge of genetics?

	Ν
Excellent	270
Good	1,618
Moderate	1,850
Slight	1,105
Inexistant	220
TOTAL	5,063

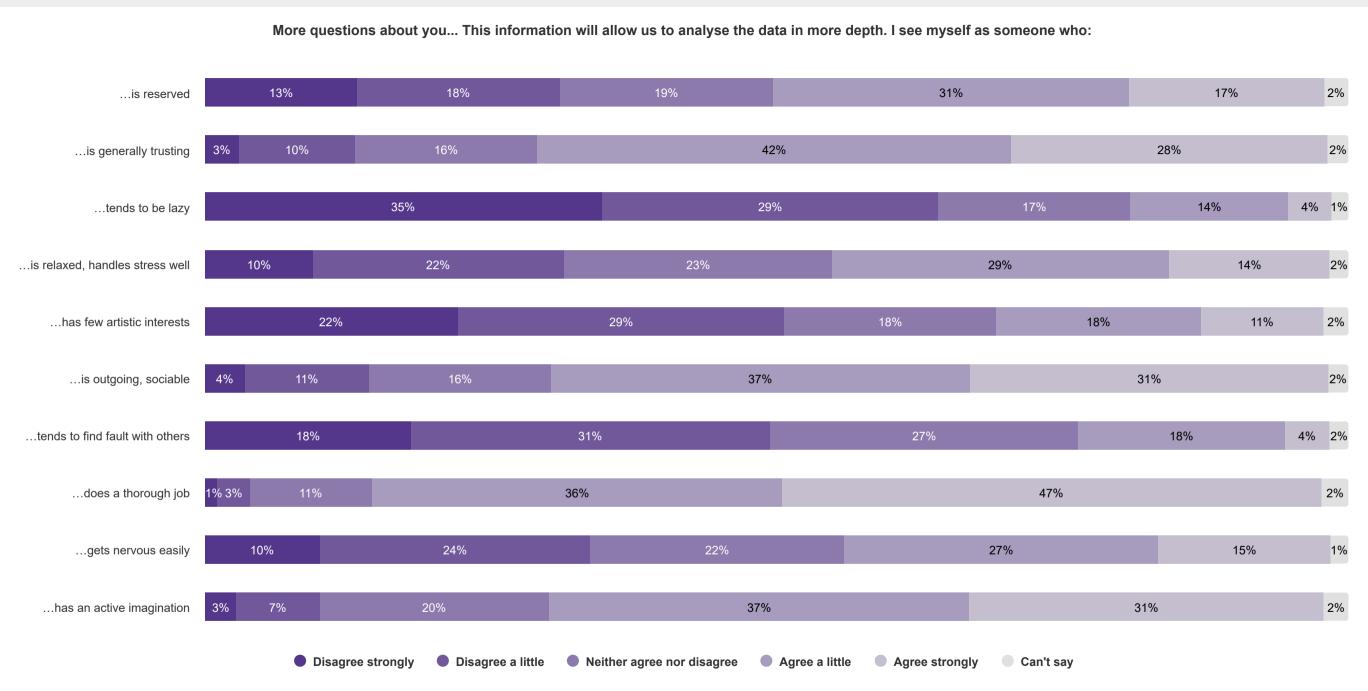




How would you best describe yourself?

	Ν	
I belong to the ethnic majority in the country where I live	4,217	
I am part of an ethnic minority in the country where I live	224	
Other, specify	139	
TOTAL	4,580	







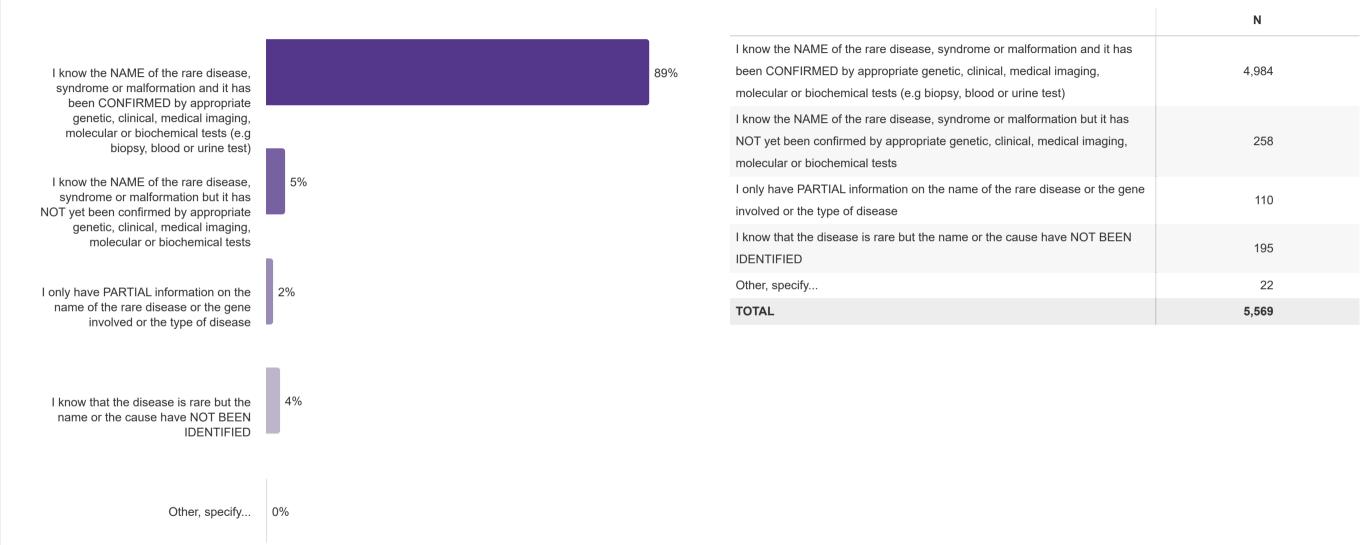
	DISAGREE STRONGLY	DISAGREE A LITTLE	NEITHER AGREE NOR DISAGREE	AGREE A LITTLE	AGREE STRONGLY	CAN'T SAY	TOTAL
is reserved	680	905	946	1,585	867	101	5,084
is generally trusting	156	514	811	2,110	1,406	87	5,084
tends to be lazy	1,769	1,495	857	699	193	71	5,084
is relaxed, handles stress well	483	1,119	1,193	1,496	712	81	5,084
has few artistic interests	1,132	1,449	940	913	544	106	5,084
is outgoing, sociable	183	551	810	1,862	1,594	84	5,084
tends to find fault with others	922	1,595	1,368	921	196	81	5,083
does a thorough job	56	150	542	1,823	2,396	116	5,083
gets nervous easily	514	1,202	1,129	1,397	765	76	5,083
has an active imagination	144	370	1,020	1,868	1,576	105	5,083

More questions about you... This information will allow us to analyse the data in more depth. I see myself as someone who:



Please select the sentence that best describes your situation:

Please select the sentence that best describes your situation:

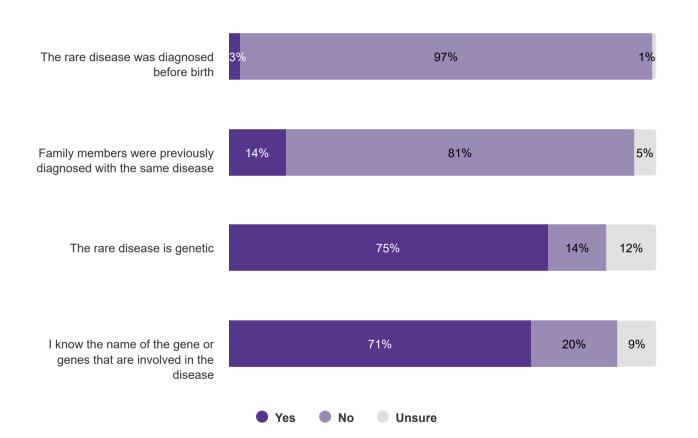




Note: These questions were only asked to respondents who said that the rare disease has been diagnosed. The last item was only asked to those who indicated that the rare diseases is genetic.



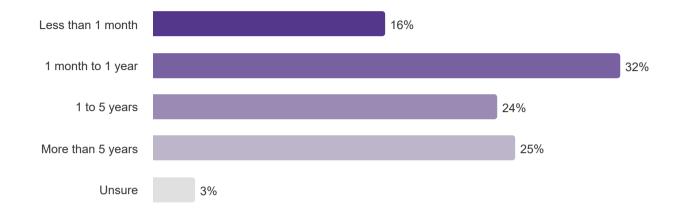
Do the following sentences apply to your situation?



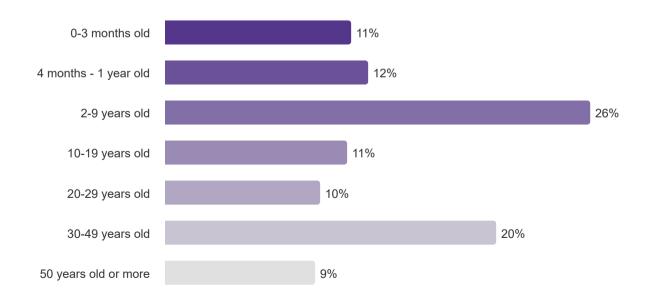
	YES	NO	UNSURE	TOTAL
The rare disease was diagnosed before birth	149	5,139	32	5,320
Family members were previously diagnosed with the same disease	725	4,329	266	5,320
The rare disease is genetic	3,981	725	614	5,320
I know the name of the gene or genes that are involved in the disease	3,261	927	406	4,594



How long did it take from the first medical encounter for the diagnosis to be confirmed by appropriate genetic, clinical, medical imaging, molecular or biochemical tests (e.g., biopsy, blood or urine test):



How old were you when you received a confirmed diagnosis?



How long did it take from the first medical encounter for the diagnosis to be confirmed by appropriate genetic, clinical, medical imaging, molecular or biochemical tests (e.g., biopsy, blood or urine test):

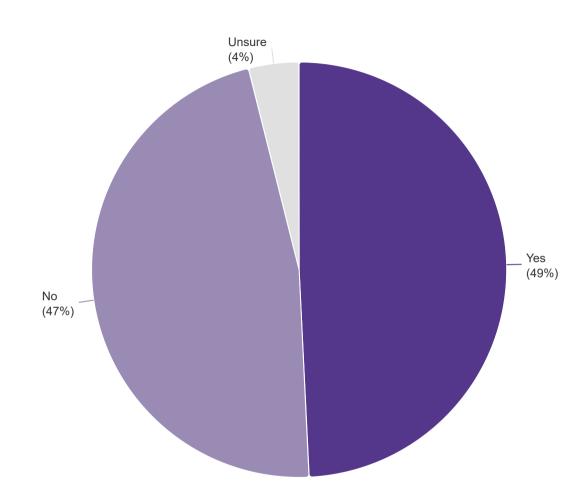
	Ν
Less than 1 month	825
1 month to 1 year	1,655
1 to 5 years	1,222
More than 5 years	1,284
Unsure	152
TOTAL	5,138

How old were you when you received a confirmed diagnosis?

	Ν	
0-3 months old	587	
4 months - 1 year old	638	
2-9 years old	1,335	
10-19 years old	574	
20-29 years old	489	
30-49 years old	1,040	
50 years old or more	474	
TOTAL	5,137	

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Note: These questions were only asked to respondents who said that the rare disease has been diagnosed.



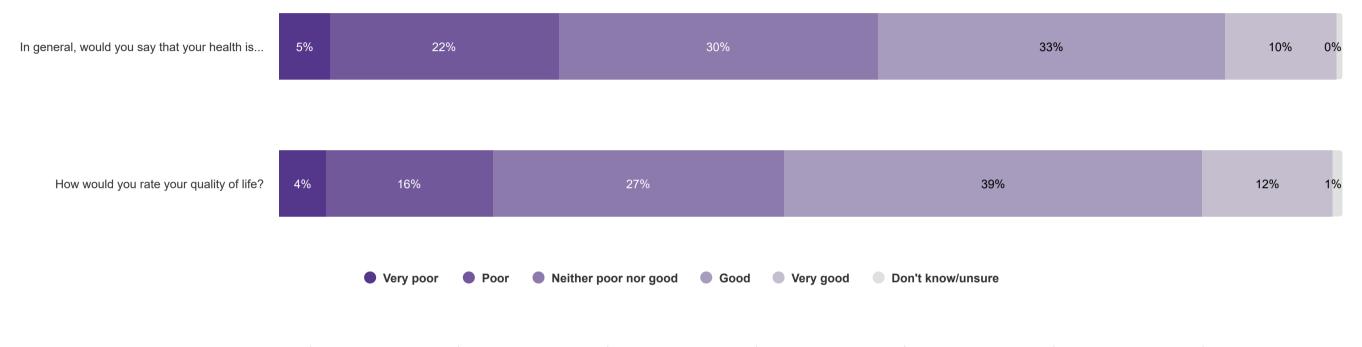
Was the rare disease diagnosed through standard tests carried out at birth?

This question was only asked when patients were diagnosed under 3 months old.

Was the rare disease diagnosed through standard tests carried out at birth?

	Ν
Yes	289
No	275
Unsure	23
TOTAL	587





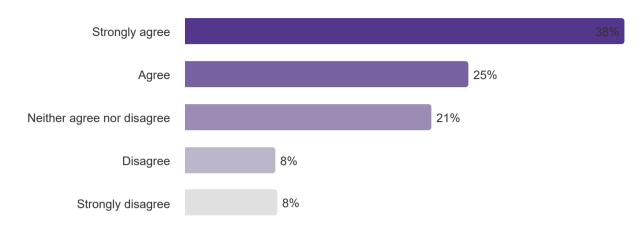
	VERY POOR	POOR	NEITHER POOR NOR GOOD	GOOD	VERY GOOD	DON'T KNOW/UNSURE	TOTAL
In general, would you say that your health is	274	1,200	1,667	1,822	579	27	5,569
How would you rate your quality of life?	250	875	1,524	2,191	683	46	5,569



...I would have liked to be diagnosed AT BIRTH

	Ν
Strongly agree	965
Agree	624
Neither agree nor disagree	542
Disagree	199
Strongly disagree	204
TOTAL	2,534

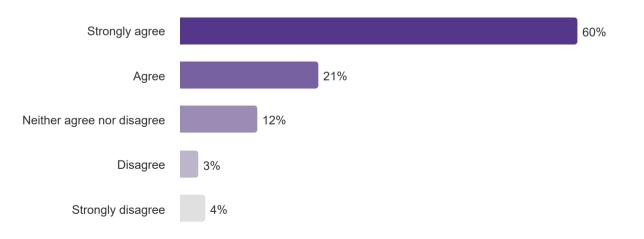
...I would have liked to be diagnosed AT BIRTH



...I would have liked the person I care for to be diagnosed AT BIRTH

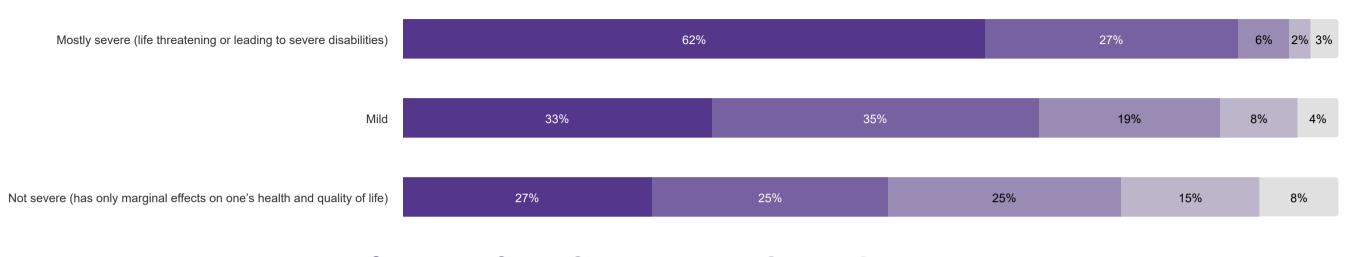
	Ν
Strongly agree	1,812
Agree	634
Neither agree nor disagree	354
Disagree	86
Strongly disagree	116
TOTAL	3,002

 \ldots I would have liked the person I care for to be diagnosed AT BIRTH





In your opinion, should ANY RARE DISEASE be screened at birth, PROVIDED THAT it is:



Strongly agree Agree Neither agree nor disagree Disagree Strongly disagree

In your opinion, should ANY RARE DISEASE be screened at birth, PROVIDED THAT it is:

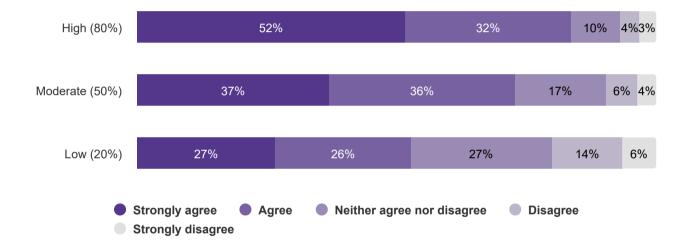
	STRONGLY AGREE	AGREE	NEITHER AGREE NOR DISAGREE	DISAGREE	STRONGLY DISAGREE	TOTAL
Mostly severe (life threatening or leading to severe disabilities)	3,475	1,502	308	126	158	5,569
Mild	1,844	1,953	1,076	459	237	5,569
Not severe (has only marginal effects on one's health and quality of life)	1,490	1,407	1,386	824	462	5,569

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When screening for a disease, there can be a chance that the disease will not develop even if the test is positive. In your opinion, should ANY rare disease be screened at birth PROVIDED THAT if the test is positive, the chance for the disease to actually appear is:

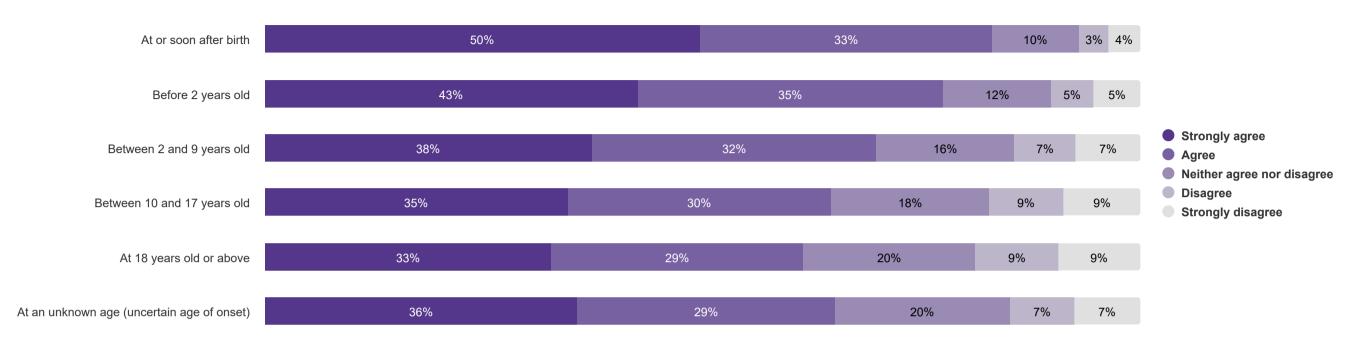
When screening for a disease, there can be a chance that the disease will not develop even if the test is positive. In your opinion, should ANY rare disease be screened at birth PROVIDED THAT if the test is positive, the chance for the disease to actually appear is:



	AGREE	STRONGLY AGREE	NEITHER AGREE NOR DISAGREE	DISAGREE	STRONGLY DISAGREE	TOTAL
High (80%)	1,779	2,886	532	196	176	5,569
Moderate (50%)	2,005	2,067	972	329	196	5,569
Low (20%)	1,454	1,495	1,514	757	349	5,569



A disease can be diagnosed at birth but only manifest later in life. In your opinion, should ANY rare disease be screened at birth, PROVIDED THAT the first symptoms typically appear:



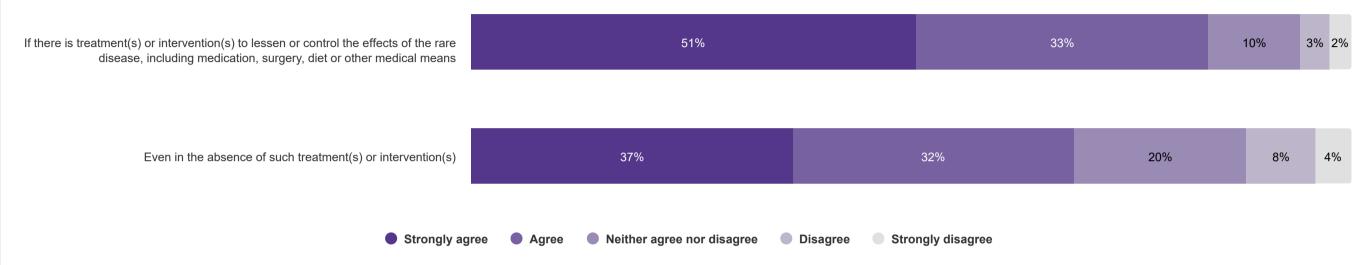
A disease can be diagnosed at birth but only manifest later in life. In your opinion, should ANY rare disease be screened at birth, PROVIDED THAT the first symptoms typically appear:

	STRONGLY AGREE	AGREE	NEITHER AGREE NOR DISAGREE	DISAGREE	STRONGLY DISAGREE	TOTAL
At or soon after birth	2,778	1,854	552	190	195	5,569
Before 2 years old	2,380	1,944	685	268	292	5,569
Between 2 and 9 years old	2,090	1,808	873	392	406	5,569
Between 10 and 17 years old	1,934	1,672	1,006	474	483	5,569
At 18 years old or above	1,826	1,603	1,095	529	516	5,569
At an unknown age (uncertain age of onset)	1,995	1,637	1,115	406	416	5,569

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The next few questions will be about your opinion on using tests to screen for ANY RARE DISEASE at birth. In your opinion, should ANY RARE DISEASE be screened at birth:

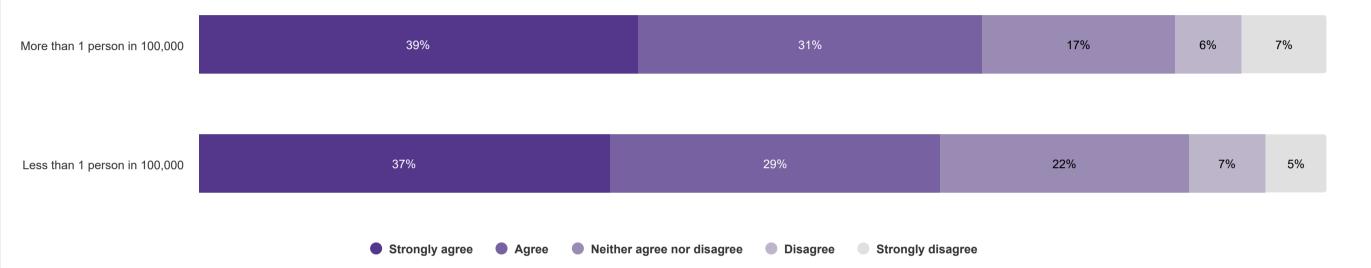


The next few questions will be about your opinion on using tests to screen for ANY RARE DISEASE at birth. In your opinion, should ANY RARE DISEASE be screened at birth:

	STRONGLY AGREE	AGREE	NEITHER AGREE NOR DISAGREE	DISAGREE	STRONGLY DISAGREE	TOTAL
If there is treatment(s) or intervention(s) to lessen or control the effects of the rare disease, including medication, surgery, diet or other medical means	2,825	1,846	584	178	136	5,569
Even in the absence of such treatment(s) or intervention(s)	2,047	1,776	1,090	436	220	5,569



In your opinion, should ANY RARE DISEASE be screened at birth PROVIDED THAT it affects:



In your opinion, should ANY RARE DISEASE be screened at birth PROVIDED THAT it affects:

	STRONGLY AGREE	AGREE	NEITHER AGREE NOR DISAGREE	DISAGREE	STRONGLY DISAGREE	TOTAL
More than 1 person in 100,000	2,172	1,703	953	328	413	5,569
Less than 1 person in 100,000	2,036	1,631	1,232	375	295	5,569



In your opinion, should ANY RARE DISEASE be screened at birth IF NO TREATMENT EXISTS AND: In your opinion, should ANY RARE DISEASE be screened at birth IF NO TREATMENT EXISTS AND:

There is an opportunity for the person to participate in research to improve THEIR OWN disease	50%		37%	9%	5 22% There is an to participa
There is an opportunity for the person to participate in research to improve OTHER PEOPLE'S diseases	45%		36%	13%	322% THEIR OW to participation OTHER PE
It would allow families to plan or make lifestyle adjustments in advance (such as moving to a new house or fitting a home for disabilities)	50%		36%	9%	1t would all 1ifestyle ad as moving home for d
Supportive care, for example physiotherapy or behavioural interventions (meant for self-control or emotional regulation), CAN improve the management of the disease	52%		36%	9%	5 Supportive physiother intervention emotional
Supportive care, for example physiotherapy or behavioural interventions (meant for self-control or emotional regulation), CANNOT improve the management of the disease It would allow the person to have their disabilities better recognised, and to obtain more adequate social support	30% 55%	26%	21% 35%	-	2% Supportive physiother intervention emotional improve th disease
and independent living Strongly agree Strongly disagree 	•	er agree nor disa	gree 🔵 Disagr	ee	It would all disabilities obtain mor

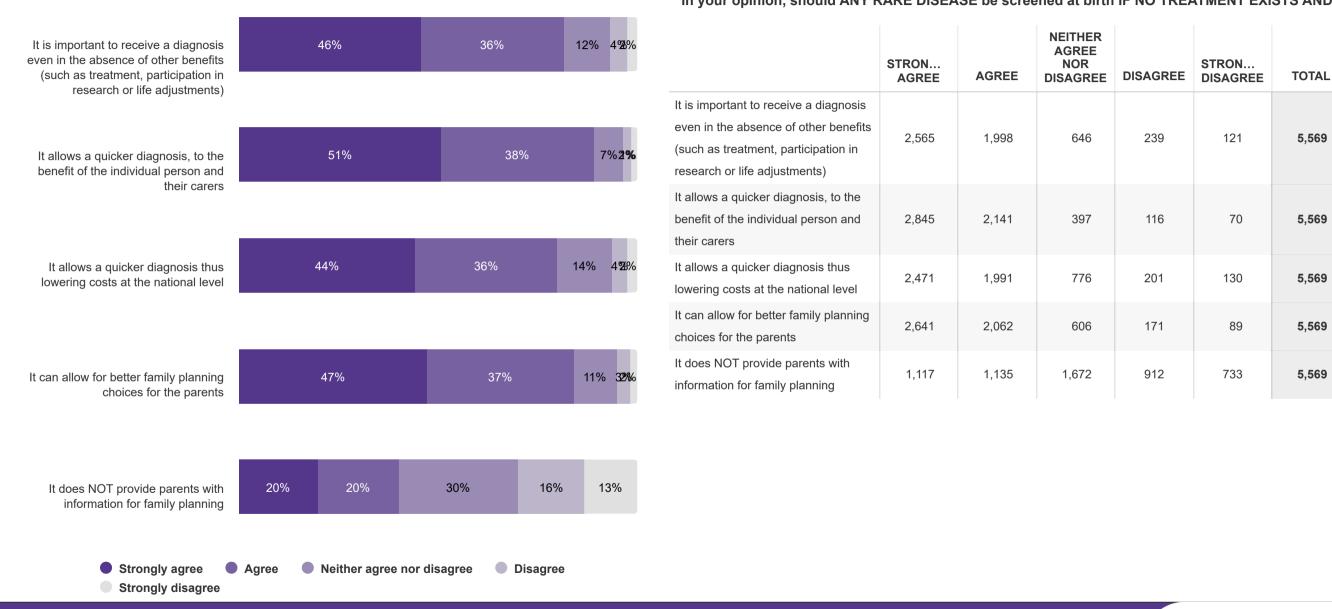
	STRON AGREE	AGREE	NEITHER AGREE NOR DISAG	DISAG	STRON DISAG	TOTAL
There is an opportunity for the person to participate in research to improve THEIR OWN disease	2,792	2,040	527	123	87	5,569
There is an opportunity for the person to participate in research to improve OTHER PEOPLE'S diseases	2,521	2,030	731	186	101	5,569
It would allow families to plan or make lifestyle adjustments in advance (such as moving to a new house or fitting a home for disabilities)	2,809	2,004	515	153	88	5,569
Supportive care, for example physiotherapy or behavioural interventions (meant for self-control or emotional regulation), CAN improve the management of the disease	2,877	2,006	475	112	99	5,569
Supportive care, for example physiotherapy or behavioural interventions (meant for self-control or emotional regulation), CANNOT improve the management of the disease	1,656	1,430	1,155	671	657	5,569
It would allow the person to have their disabilities better recognised, and to obtain more adequate social support	3,045	1,952	397	101	74	5,569

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In your opinion, should ANY RARE DISEASE be screened at birth IF NO TREATMENT EXISTS AND:



In your opinion, should ANY RARE DISEASE be screened at birth IF NO TREATMENT EXISTS AND:

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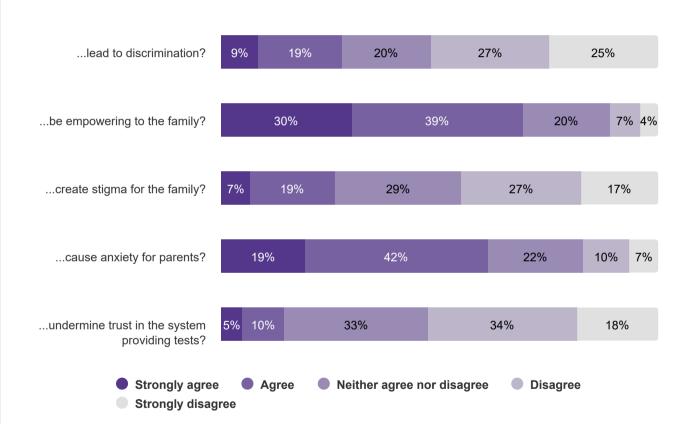
In your opinion, should ANY RARE DISEASE be screened at birth IF NO TREATMENT EXISTS AND:

Knowing a child's mental or physical 50% 37% 9% 31% limitations in advance can allow more appropriate parenting The disease can be followed-up on and 51% 38% 7%2% harm can be avoided through prevention practices 422% It can possibly predict the patient's 37% 36% 20% response to medication, unrelated to the presence of a rare disease It can allow family members to know 51% 38% 8% 2% whether they carry the variant causing the disease There is an opportunity to join a patient 44% 39% 13% 32% support group or an online community 11% There is NO opportunity to join a 22% 22% 29% 15% patient support group or an online community • Strongly agree Neither agree nor disagree Agree Disagree Strongly disagree

In your opinion, should ANY RARE DISEASE be screened at birth IF NO TREATMENT EXISTS AND:

	STRON AGREE	AGREE	NEITHER AGREE NOR DISAG	DISAG	STRON DISAG	TOTAL
Knowing a child's mental or physical limitations in advance can allow more appropriate parenting	2,787	2,080	476	154	72	5,569
The disease can be followed-up on and harm can be avoided through prevention practices	2,858	2,136	411	91	73	5,569
It can possibly predict the patient's response to medication, unrelated to the presence of a rare disease	2,068	2,016	1,132	237	116	5,569
It can allow family members to know whether they carry the variant causing the disease	2,854	2,106	423	120	66	5,569
There is an opportunity to join a patient support group or an online community	2,462	2,159	704	152	92	5,569
There is NO opportunity to join a patient support group or an online community	1,253	1,249	1,624	819	624	5,569





In your opinion, could screening for ANY RARE DISEASE at birth...

In your opinion, could screening for ANY RARE DISEASE at birth...

	STRON AGREE	AGREE	NEITHER AGREE NOR DISAG	DISAG	STRON DISAG	TOTAL
lead to discrimination?	482	1,069	1,141	1,505	1,372	5,569
be empowering to the family?	1,682	2,181	1,101	384	221	5,569
create stigma for the family?	388	1,073	1,616	1,522	970	5,569
cause anxiety for parents?	1,083	2,331	1,216	577	362	5,569
undermine trust in the system providing tests?	278	538	1,841	1,893	1,019	5,569



Thank you!

For any questions, please contact the Rare Barometer team at <u>rare.barometer@eurordis.org</u>

