



Perspectives on Sepsis, AMR and IVD

TECHNICAL NOTE

On behalf of BioMérieux and UK Sepsis Trust, Ipsos MORI UK Ltd conducted an online survey among a representative sample of 7,701 adults aged 18+ across 5 countries (UK n=1,549, France n=1,509, Germany n=1,515, Sweden n=1,613, Italy n=1,515) between 1st June and 22nd June 2021.

To identify a representative sample of adults aged 18+, quotas were set by age within gender, geographic area of residence, level of education and work status. Weighting has been applied to bring the sample in line with the known population profile of these audiences. The overall total results are based on country averages across the five countries and each country was weighted equally.



SCREENER

SCOUNTRY. IN WHICH COUNTRY DO YOU LIVE?

France	N=1,509
Germany	N=1,515
Italy	N=1,515
Sweden	N=1,613
United Kingdom	N=1,549

SGENDER. WHICH OF THE FOLLOWING DESCRIBES HOW YOU THINK OF YOURSELF?

	Adults (n=7,701)
Male	48%
Female	52%
In another way	-

SAGE. PLEASE WRITE YOUR AGE IN THE BOX BELOW, AS OF YOUR LAST BIRTHDAY.

50 years on average

SREGION. WHICH REGION DO YOU LIVE IN?

France

	Adults (n=1,509)
Ille	20%
Nord est	23%
Nord oest	16%
Oest	13%
Sudeast	29%

Germany

	Adults (n=1,515)
North	19%
East	23%
West	40%
South	18%

Italy

	Adults (n=1,515)
Nordovest	27%
Nord est	19%



Centro	20%
Sud	23%
Isole	11%

Sweden

	Adults (n=1,613)
North Sweden	9%
Central Sweden	24%
Stockholm	23%
Western Sweden	21%
Southern Sweden	23%

United Kingdom

	Adults (n=1,549)
North East And Yorkshire	12%
North West	11%
Midlands	17%
East and South East	23%
London	13%
South West and Wales	13%
Scotland	8%
Northern Ireland (UK)	3%

EMPLOYMENT. WHICH OF THESE BEST APPLIES TO YOU?

	Adults (n=7,701)
Senior Executive	4%
Intellectual or scientific personnel	9%
Intermediate occupation	14%
Small-business owner	4%
Skilled employee	20%
Service staff, store clerk, low-skilled worker	7%
Not working	41%

EDUCATION. WHICH OF THE FOLLOWING, IF ANY, IS THE HIGHEST EDUCATIONAL OR PROFESSIONAL QUALIFICATION YOU HAVE OBTAINED?

	Adults (n=7,701)
Levels 0-2 (no formal education, primary and lower secondary)	16%
Levels 3-8 (upper secondary – masters/phd)	84%



SCONDITION. WHICH OF THE FOLLOWING – IF ANY – DO YOU CURRENTLY HAVE OR HAVE BEEN DIAGNOSED WITH IN THE PAST YEAR?

	Adults (n=7,701)
High blood pressure / hypertension	19%
High cholesterol	12%
COVID-19	8%
Type 2 diabetes	7%
Urinary tract infection	6%
Influenza	5%
Gastrointestinal infections	4%
Cardiovascular event	3%
Pharyngitis	2%
Kidney disease	2%
Type 1 diabetes	2%
Pneumonia	1%
Sexually Transmitted Infection	1%
None of the above/ DK	55%
Prefer not to say	1%

SANTIBIOTIC. HAVE YOU TAKEN ANY ANTIBIOTICS IN THE PAST YEAR?

	Adults (n=7,701)
Yes – I have taken antibiotics in the past year	32%
No – I have not taken antibiotics in the past year	66%
Don't know	2%

Main Questionnaire

SECTION A: SEPSIS

A1. WHICH OF THE FOLLOWING CONDITIONS, IF ANY, HAVE YOU HEARD OF?

	Adults (n=7,701)
Diabetes	91%
Asthma	90%
Stroke	89%
Epilepsy	85%
Meningitis	82%
Cystic fibrosis	68%
Acute Kidney Injury	59%
Sepsis	52%
I have not heard of any of these conditions	3%
Don't know	1%

Adults (n=7,701)	UK (n=1,459)	France (n=1,509)	Germany (n=1,515)	Italy (n=1,515)	Sweden (n=1,613)
Diabetes	92%	87%	93%	90%	96%
Asthma	93%	86%	91%	86%	94%
Stroke	90%	84%	92%	86%	93%
Epilepsy	89%	77%	86%	82%	92%
Meningitis	87%	72%	86%	81%	87%
Cystic fibrosis	83%	74%	63%	66%	55%
Acute Kidney Injury	44%	53%	67%	62%	69%
Sepsis	82%	7%	83%	33%	55%
I have not heard of any of these conditions	3%	5%	3%	4%	1%
Don't know	1%	1%	1%	1%	-

A2A. BEFORE COMPLETING THIS SURVEY TODAY, HOW MUCH, IF ANYTHING, WOULD YOU SAY YOU KNEW ABOUT SEPSIS, BASED ON THE BELOW DEFINITION?

Sepsis, previously known as septicaemia or blood poisoning, is a life-threatening reaction that happens when your immune system overreacts to an infection and starts to damage your body's own tissues and organs.

	Adults (n=7,701)
I knew a great deal about Sepsis	11%
I was somewhat knowledgeable about Sepsis	39%
I had heard of Sepsis but knew nothing about it	28%
I had never heard of Sepsis	21%
I do not know	2%

Adults (n=7,701)	UK (n=1,459)	France (n=1,509)	Germany (n=1,515)	Italy (n=1,515)	Sweden (n=1,613)
I knew a great deal about Sepsis	8%	13%	15%	11%	10%
I was somewhat knowledgeable about Sepsis	53%	19%	50%	30%	41%
I had heard of Sepsis but knew nothing about it	33%	14%	29%	33%	29%
I had never heard of Sepsis	5%	49%	5%	25%	19%
I do not know	1%	4%	1%	1%	2%

A2B. FROM WHERE DID YOU HEAR ABOUT SEPSIS?

As a reminder - Sepsis, previously known as septicaemia or blood poisoning, is a life-threatening reaction that happens when your immune system overreacts to an infection and starts to damage your body's own tissues and organs.

	Those who have heard of Sepsis (n=6,013)
Friends/ family	33%
On television	30%
Healthcare professional	24%
On the Internet	21%
Magazine / newspaper	16%
At school/ college or other educational institutions	15%
Colleagues or other people	12%
Poster / leaflet in a healthcare setting	9%
Social media	8%
On the radio	6%
From elsewhere	7%
Don't know	8%

Those who have heard of Sepsis (n=6,013)	UK (n=1,458)	France (n=706)	Germany (n=1,434)	Italy (n=1,136)	Sweden (n=1,279)
Friends/ family	35%	29%	35%	29%	34%
On television	38%	21%	29%	36%	22%
Healthcare professional	20%	23%	32%	19%	24%
On the Internet	21%	14%	26%	20%	21%
Magazine / newspaper	13%	11%	19%	17%	17%
At school/ college or other educational institutions	10%	16%	17%	14%	18%
Colleagues or other people	10%	13%	14%	10%	15%
Poster / leaflet in a healthcare setting	11%	5%	11%	9%	4%

Social media	10%	4%	7%	8%	9%
On the radio	9%	6%	5%	3%	4%
From elsewhere	7%	7%	8%	5%	7%
Don't know	9%	9%	5%	6%	12%

A3. HOW WOULD YOU DESCRIBE YOUR OWN PERSONAL EXPERIENCE WITH SEPSIS?

As a reminder - Sepsis, previously known as septicaemia or blood poisoning, is a life-threatening reaction that happens when your immune system overreacts to an infection and starts to damage your body's own tissues and organs.

	Those who have heard of Sepsis (n=6,013)
A close family member / friend has had Sepsis	14%
Someone I know (but am not close to) has had Sepsis	13%
Someone I am aware of but do not personally know has had Sepsis	11%
Someone else I am close to has had Sepsis	6%
I have personally had Sepsis	5%
Myself or someone I know had suspected Sepsis	3%
I do not know anyone who has had Sepsis	53%
Don't know	3%
Prefer not to say	1%

Those who have heard of Sepsis (n=6,013)	UK (n=1,458)	France (n=706)	Germany (n=1,434)	Italy (n=1,136)	Sweden (n=1,279)
A close family member / friend has had Sepsis	16%	12%	15%	10%	13%
Someone I know (but am not close to) has had Sepsis	15%	10%	14%	8%	17%
Someone I am aware of but do not personally know has had Sepsis	11%	7%	13%	10%	13%
Someone else I am close to has had Sepsis	5%	6%	6%	5%	7%
I have personally had Sepsis	4%	4%	8%	2%	8%
Myself or someone I know had suspected Sepsis	3%	2%	5%	3%	3%
I do not know anyone who has had Sepsis	52%	63%	44%	67%	45%
Don't know	2%	3%	2%	2%	4%
Prefer not to say	-	1%	1%	-	1%

A4. TO WHAT EXTENT DO YOU AGREE OR DISAGREE WITH THE FOLLOWING STATEMENTS?

As a reminder - Sepsis, previously known as septicaemia or blood poisoning, is a life-threatening reaction that happens when your immune system overreacts to an infection and starts to damage your body's own tissues and organs.

Adults (n=7,701)	Strongly agree	Somewhat agree	Neither agree/disagree	Somewhat agree	Strongly agree	Don't know
I would be concerned about getting Sepsis if I had an infection	25%	31%	18%	11%	4%	12%
There are certain groups of people at higher risk of getting Sepsis	13%	27%	19%	5%	2%	34%
Sepsis is difficult to diagnose because of varied symptoms	11%	27%	20%	8%	2%	32%
I am personally concerned about getting Sepsis	10%	19%	25%	20%	15%	11%
Sepsis is a common condition	4%	15%	24%	24%	8%	25%
There are actions I can personally take to reduce my risk of getting Sepsis	14%	27%	20%	5%	2%	31%
I personally take action(s) to reduce my risk of getting Sepsis	11%	18%	27%	13%	14%	17%
My country's health system is doing all they can to tackle Sepsis	16%	25%	21%	6%	2%	31%
The pharmaceutical industry is doing all they can to tackle Sepsis	12%	23%	23%	6%	2%	35%

Adults (n=7,701) T2B	UK (n=1,459)	France (n=1,509)	Germany (n=1,515)	Italy (n=1,515)	Sweden (n=1,613)
I would be concerned about getting Sepsis if I had an infection	67%	56%	56%	47%	53%
There are certain groups of people at higher risk of getting Sepsis	47%	36%	45%	38%	37%
Sepsis is difficult to diagnose because of varied symptoms	51%	32%	34%	33%	36%

I am personally concerned about getting Sepsis	30%	35%	34%	22%	23%
Sepsis is a common condition	29%	14%	23%	13%	15%
There are actions I can personally take to reduce my risk of getting Sepsis	39%	32%	56%	35%	43%
I personally take action(s) to reduce my risk of getting Sepsis	26%	20%	43%	26%	30%
My country's health system is doing all they can to tackle Sepsis	42%	40%	49%	30%	42%
The pharmaceutical industry is doing all they can to tackle Sepsis	35%	32%	45%	32%	32%

A5. BEFORE COMPLETING THIS SURVEY TODAY, WHICH OF THE FOLLOWING SYMPTOMS, IF ANY, DID YOU ASSOCIATE WITH SEPSIS?

	Those who have heard of Sepsis (n=6,013)
A lack of energy and being difficult to wake	29%
Mottled / discoloured skin	26%
Bluish or pale colour skin	24%
Muscle pain	23%
Extreme shivering	22%
Breathing very fast	19%
Severe breathlessness	19%
'Fits' or convulsions	17%
Feeling like you are going to die	15%
Feeling abnormally cold to touch	15%
A rash that does not fade when you press it	14%
Slurred speech or confusion	14%
Passing no urine (in a day)	9%
Did not associate any of these symptoms with Sepsis	16%
I do not know	19%

Those who have heard of Sepsis (n=6,013)	UK (n=1,458)	France (n=706)	Germany (n=1,434)	Italy (n=1,136)	Sweden (n=1,279)
A lack of energy and being difficult to wake	35%	37%	25%	26%	26%
Mottled / discoloured skin	29%	22%	33%	16%	26%
Bluish or pale colour skin	21%	20%	33%	17%	26%



Muscle pain	24%	30%	21%	24%	18%
Extreme shivering	26%	30%	21%	28%	9%
Breathing very fast	22%	20%	20%	15%	17%
Severe breathlessness	22%	19%	15%	20%	16%
'Fits' or convulsions	17%	17%	22%	13%	17%
Feeling like you are going to die	24%	11%	13%	9%	17%
Feeling abnormally cold to touch	18%	14%	16%	16%	10%
A rash that does not fade when you press it	22%	19%	10%	11%	11%
Slurred speech or confusion	19%	11%	12%	10%	16%
Passing no urine (in a day)	17%	12%	4%	8%	7%
Did not associate any of these symptoms with Sepsis	11%	8%	25%	19%	14%
I do not know	23%	25%	7%	19%	25%

A6. WHAT, IF ANYTHING WOULD YOU PERSONALLY DO IF SOMEONE YOU WERE WITH WAS WORRIED THEY HAD SEPSIS?

	Those who have heard of Sepsis (n=6,013)
Recommend they go to the hospital emergency department/ A&E	48%
Recommend they call the emergency line	37%
Recommend they call the non-emergency line	31%
Recommend they book an appointment with a GP or PCP	29%
Recommend they research information or advice on medical websites	6%
Recommend they speak to a pharmacist	5%
Recommend they rest in bed and wait for symptoms to subside	3%
Do something else	1%
I would not do anything	1%
Don't know	4%

Those who have heard of Sepsis (n=6,013)	UK (n=1,458)	France (n=706)	Germany (n=1,434)	Italy (n=1,136)	Sweden (n=1,279)
Recommend they go to the hospital emergency department/ A&E	40%	40%	53%	57%	47%
Recommend they call the emergency line	46%	34%	45%	24%	31%
Recommend they call the non-emergency line	36%	44%	33%	NA	43%
Recommend they book an appointment with a GP or PCP	22%	40%	28%	42%	20%

Recommend they research information or advice on medical websites	7%	3%	4%	6%	9%
Recommend they speak to a pharmacist	8%	7%	5%	4%	2%
Recommend they rest in bed and wait for symptoms to subside	3%	3%	2%	3%	2%
Do something else	-	1%	1%	1%	-
I would not do anything	-	1%	-	1%	1%
Don't know	4%	4%	2%	4%	6%

	Total	UK	France	Germany	Italy	Sweden
	N=6,013	n=1,456	n=706	n=1,434	n=1,136	n=1,279
Recommend they go to the hospital emergency department/ A&E OR call the emergency line	66%	66%	57%	75%	61%	67%

SECTION B: ANTI-MICROBIAL RESISTANCE

B1. BEFORE COMPLETING THIS SURVEY TODAY, HOW MUCH, IF ANYTHING, WOULD YOU SAY YOU KNEW ABOUT ANTIMICROBIAL RESISTANCE (AMR)?

Antimicrobial resistance (AMR) occurs when bacteria, viruses, fungi and parasites no longer respond to medicines making infections harder to treat and increasing the risk of severe illness and death. It is also known as **antibiotic resistance** when it relates specifically to bacteria

	Adults (n=7,701)
I knew a great deal about AMR	10%
I was somewhat knowledgeable about AMR	28%
I had heard of AMR but knew nothing about it	25%
I had never heard of AMR	32%
I do not know	5%

Adults (n=7,701)	UK (n=1,459)	France (n=1,509)	Germany (n=1,515)	Italy (n=1,515)	Sweden (n=1,613)
I knew a great deal about AMR	6%	16%	8%	12%	7%
I was somewhat knowledgeable about AMR	27%	23%	31%	31%	29%
I had heard of AMR but knew nothing about it	25%	18%	30%	24%	26%
I had never heard of AMR	37%	35%	27%	29%	33%
I do not know	5%	8%	3%	3%	5%

B2. TO WHAT EXTENT DO YOU AGREE OR DISAGREE WITH EACH OF THE STATEMENTS BELOW?

As a reminder - antimicrobial resistance (AMR) occurs when bacteria, viruses, fungi and parasites no longer respond to medicines making infections harder to treat and increasing the risk of severe illness and death. It is also known as antibiotic resistance when it relates specifically to bacteria

Adults (n=7,701)	Strongly agree	Somewhat agree	Neither agree/disagree	Somewhat disagree	Strongly disagree	Don't know
Misuse of antibiotics can lead to AMR	31%	33%	13%	6%	2%	16
Antibiotics are sometimes prescribed unnecessarily	42%	22%	11%	2%	1%	22
Viruses cannot be treated with antibiotics	34%	17%	13%	8%	5%	23
AMR stops treatments for Sepsis working	17%	24%	14%	3%	1%	41
AMR is only a concern for the future	6%	13%	18%	20%	18%	24

I can personally help with the fight against AMR	13%	25%	21%	6%	3%	32
AMR directly impacts friends/ family	7%	12%	21%	14%	18%	28
AMR directly impacts me	7%	11%	21%	16%	21%	24
My country's health system is doing all it can to tackle AMR	11%	25%	21%	8%	3%	33%
The pharmaceutical industry is doing all it can to tackle AMR	11%	24%	20%	8%	3%	34%

Adults (n=7,701) T2B	UK (n=1,459)	France (n=1,509)	Germany (n=1,515)	Italy (n=1,515)	Sweden (n=1,613)
Misuse of antibiotics can lead to AMR	66%	51%	72%	68%	65%
Antibiotics are sometimes prescribed unnecessarily	65%	64%	67%	62%	62%
Viruses cannot be treated with antibiotics	56%	46%	54%	44%	56%
AMR stops treatments for Sepsis working	39%	35%	64%	39%	30%
AMR is only a concern for the future	13%	24%	29%	22%	10%
I can personally help with the fight against AMR	37%	33%	48%	35%	36%
AMR directly impacts friends/ family	26%	10%	13%	20%	24%
AMR directly impacts me	26%	12%	12%	19%	24%
My country's health system is doing all it can to tackle AMR	33%	40%	34%	31%	42%

The pharmaceutical industry is doing all it can to tackle AMR	32%	34%	37%	33%	36%
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SECTION C: DIAGNOSTIC TESTS

C1. BEFORE COMPLETING THIS SURVEY TODAY, HOW MUCH, IF ANYTHING, WOULD YOU SAY YOU KNEW ABOUT THIS TYPE OF DIAGNOSTIC TESTS?

There are diagnostic tests that allow for the identification of the specific pathogens causing an infection and for identifying the best therapeutic options to treat them (eg antibiotics, antivirals, antifungals, etc).

	Adults (n=7,701)
I was very knowledgeable about diagnostic tests	7%
I was somewhat knowledgeable about diagnostic tests	20%
I had heard of diagnostic tests but knew nothing about it	29%
I had never heard of diagnostic tests	40%
I do not know	4%

Adults (n=7,701)	UK (n=1,459)	France (n=1,509)	Germany (n=1,515)	Italy (n=1,515)	Sweden (n=1,613)
I was very knowledgeable about diagnostic tests	5%	7%	6%	12%	5%
I was somewhat knowledgeable about diagnostic tests	20%	16%	16%	29%	17%
I had heard of diagnostic tests but knew nothing about it	32%	24%	35%	27%	29%
I had never heard of diagnostic tests	40%	47%	41%	28%	42%
I do not know	3%	6%	2%	4%	6%

C2. TO WHAT EXTENT, IF AT ALL, HAS THE COVID-19 PANDEMIC CHANGED YOUR VIEW ON THE IMPORTANCE OF THIS TYPE OF DIAGNOSTIC TESTS IN THE APPROPRIATE MANAGEMENT OF INFECTIOUS DISEASES?

As a reminder – there are diagnostic tests that allow for the identification of the specific pathogens causing an infection and for identifying the best therapeutic options to treat them (eg antibiotics, antivirals, antifungals, etc).

	Those aware of diagnostic tests (4,319)
I now think these tests are much more important	37%
I now think these tests are slightly more important	26%
My view on the importance of these tests has not changed	32%
I now think these tests are slightly less important	1%
I now think these tests are much less important	1%
Don't know	3%

Those aware of diagnostic tests (4,319)	UK (n=858)	France (n=714)	Germany (n=856)	Italy (n=1,045)	Sweden (n=846)
I now think these tests are much more important	41%	28%	36%	41%	34%
I now think these tests are slightly more important	24%	31%	25%	24%	29%
My view on the importance of these tests has not changed	30%	34%	33%	31%	29%
I now think these tests are slightly less important	1%	1%	2%	1%	2%
I now think these tests are much less important	1%	1%	2%	-	1%
Don't know	2%	4%	2%	3%	5%

C3. BELOW IS A LIST OF ACTIONS THAT NATIONAL HEALTH SYSTEMS, DRUG MANUFACTURERS, DIAGNOSTICS MANUFACTURERS AND VACCINE MANUFACTURERS COULD TAKE TO IMPROVE THE MANAGEMENT OF SEPSIS AND THE PROBLEM OF ANTIMICROBIAL RESISTANCE. TO WHAT EXTENT DO YOU AGREE OR DISAGREE WITH THE FOLLOWING STATEMENTS:

As a reminder - antimicrobial resistance (AMR) occurs when bacteria, viruses, fungi and parasites no longer respond to medicines making infections harder to treat and increasing the risk of severe illness and death. It is also known as antibiotic resistance when it relates specifically to bacteria

Adults (n=7,701)	Strongly agree	Somewhat agree	Neither agree/disagree	Somewhat agree	Strongly agree	Don't know
Introduce better infection prevention and control practices in hospitals that can reduce infections that can lead to Sepsis	49%	28%%	9%	2%	1%	11%
Better access to easy-to-understand information about antimicrobial resistance	43%	33%	11%	2%	1%	10%
Better access to easy-to-understand information about Sepsis	42%	33%	11%	2%	1%	11%
Faster diagnostic tools that can be used to select the most appropriate antibiotic	47%	29%	10%	2%	1%	12%
Faster diagnostic tools that can be used to confirm Sepsis	46%	29%	10%	2%	1%	12%
Better diagnostic tools to predict whether the selected antibiotic will treat Sepsis	44%	30%	10%	2%	1%	14%
More education for the general public on the appropriate use of antibiotics	52%	28%	9%	2%	1%	9%
More education for the general public on infection prevention	48%	32%	9%	2%	1%	9%
More education for the general public on early Sepsis symptoms	47%	32%	9%	2%	1%	10%
More education for the general public on infection treatment	45%	33%	10%	2%	1%	9%
More education on what I can personally do to help prevent infection	44%	32%	11%	2%	1%	10%

Adults (n=7,701) T2B	UK (n=1,459)	France (n=1,509)	Germany (n=1,515)	Italy (n=1,515)	Sweden (n=1,613)
Introduce better infection prevention and control practices in hospitals that can reduce infections that can lead to Sepsis	80%	76%	79%	78%	70%
Better access to easy-to-understand information about antimicrobial resistance	79%	74%	77%	78%	72%
Better access to easy-to-understand information about Sepsis	81%	71%	76%	76%	71%
Faster diagnostic tools that can be used to select the most appropriate antibiotic	78%	73%	76%	79%	71%
Faster diagnostic tools that can be used to confirm Sepsis	80%	71%	77%	78%	71%
Better diagnostic tools to predict whether the selected antibiotic will treat Sepsis	78%	69%	76%	77%	68%
More education for the general public on the appropriate use of antibiotics	82%	78%	83%	81%	74%
More education for the general public on infection prevention	81%	80%	81%	80%	74%
More education for the general public on early Sepsis symptoms	84%	76%	79%	78%	74%
More education for the general public on infection treatment	80%	77%	80%	80%	73%
More education on what I can personally do to help prevent infection	77%	73%	81%	79%	70%