

## **COVID-19 Vaccine Perceptions:** A 15-country study

February 2021





## Contents

1	Introduction and Background	
1.1	Introduction and Background	
2	Key Findings	
2.1	Executive Summary	
2.2	Experience and Perceptions of COVID-19	
2.3	COVID-19 Vaccine Awareness and	
	Perceptions	
2.4	COVID-19 rumors and Information Sources	
2.5	Vaccine Confidence and the Impact of COVID-19	
3	Results by Country	
3.1	Burkina Faso	
3.2	Côte d'Ivoire	
3.3	Democratic Republic of the Congo	
3.4	Ethiopia	
3.5	Gabon	
3.6	Kenya	
3.7	Malawi	
3.8	Могоссо	
3.9	Niger	
3.10	Nigeria	
3.11	Senegal	
3.12	South Africa	
3.13	Sudan	
3.14	Tunisia	
3.15	Uganda	
_		
4	Appendices	

4.1	Methodological Statement
4.2	Sample Breakdown
4.3	Survey Questionnaires



# Introduction and Background



1.1 Introduction and Background



## 1.1 Introduction and Background

### 1.1.1 Introduction and research aims

Since the emergence of COVID-19 in Wuhan, China, in December 2019, the disease has been declared a global pandemic and has been associated with the deaths of more than 2.3 million people around the world. It continues to be a dynamic and evolving pandemic.

The first case in Africa was reported in Egypt on 14 February 2020 and cases have since been reported in all 55 African Union Member States. At the start of 2021, Africa faced a second wave, with far more reported cases and deaths than in the early months of the global pandemic. In addition, new virus variants have emerged.

Initial public health responses to control the pandemic focused on promoting protective behaviors among the general population, including frequent hand washing, physical distancing and the use of face masks in public spaces. However, many saw these only as interim measures to reduce the spread of the virus and hopes for a return to a sense of 'normality' rested on the development of a safe and effective vaccine.

However, even a highly effective vaccine requires sufficiently widespread willingness to accept it to successfully protect populations at large. There are many contributing factors contributing to public acceptance of vaccines including concerns about safety and efficacy, as well as the spread of misinformation – which is particularly rampant in the context of the COVID-19 pandemic. In order to guide needed communications and engagement strategies to support the roll out of COVID-19 vaccines, it is vital to understand public attitudes across Africa.

The aim of this study is to investigate public knowledge and perceptions of both the COVID-19 pandemic itself and COVID-19 vaccine acceptance among adults (aged 18 years and above) in 15 African countries. This study will help identify knowledge gaps, beliefs and attitudes that can help inform Africa CDC as well as other immunization stakeholders in their strategies for supporting the roll-out of Covid-19 vaccines in the continent.

### 1.1.2 Survey methodology and approach

This survey of public opinion was conducted in 15 countries<sup>\*\*</sup> across Africa between August and December 2020. It is a mixed methodology study combining face-to-face (F2F) and telephone (CATI – computer assisted telephone interviewing) approaches in different countries, with a minimum of 1,000 interviews in each. The 15 countries were selected to cover CDC Africa's five regions (Northern, Western, Central, Eastern and Southern) and

to include countries with both higher and lower reported rates of COVID-19 cases, and countries with both larger and smaller populations. For further details on the methodology please see the Methodological Statement in Section 4 of this report.

The study was conducted by ORB International in collaboration with the Vaccine Confidence Project<sup>™</sup> at the London School of Hygiene & Tropical Medicine on behalf of Africa CDC, who has funded this study with additional support from the Bill & Melinda Gates Foundation.

### 1.1.3 Structure of this report

This report shares the **findings** of this study, based on data collected in the 15 countries. Following the Executive Summary are three thematic sections exploring experiences and perceptions of COVID-19, awareness and attitudes relating to COVID-19 vaccines, trusted information sources, and the impact of the ongoing pandemic on overall vaccine confidence.

This is followed by individual country reports. This report includes analysis of a number of different subgroups based on various demographic and attitudinal measures (e.g., those who agree vaccines are safe compared to those who disagree). Finally, the term (and measure) 'vaccine confidence' is derived from the responses to the questions on whether vaccines are deemed to be important, safe or effective by respondents. A lack of confidence or uncertainty about whether or not to take a vaccine can be driven by multiple factors, including lack of confidence in the safety and effectiveness of vaccines, but can also be due to religious or traditional beliefs, distrust in government or international bodies, or the influences of mis- and disinformation circulating both online as well as through mainstream media and information sharing.

Reporting conventions, including abbreviations and combination of responses are explained in 4.1.6 in section 4 of this report.

\*\*Northern region: Morocco and Tunisia; Eastern region: Sudan, Ethiopia, Kenya and Uganda; Central region: Gabon and DR Congo; Southern region: South Africa and Malawi; Western region: Nigeria, Niger, Cote d'Ivoire, Burkina Faso and Senegal.



## Key Findings

2.1	Executive Summary
2.2	Experience and Perceptions of
	COVID-19
2.3	COVID-19 Vaccine Awareness and
	Attitudes
2.4	COVID-19 rumors and Information
	Sources
2.5	Vaccine Confidence and the Impact
	of COVID-19



## 2.1 Executive Summary

### Reported willingness to accept a COVID-19 vaccine was highly variable across the African countries surveyed, with significant regional differences

- Intent to accept a COVID-19 vaccine ranges from higher acceptance reported in Ethiopia and Niger to the lowest willingness reported in Senegal and DRC.
- There was also little testing available at the time the survey was conducted, so allow wareness about the number of people who were ill with COVID-19, versus other illnesses with similar symptoms, likely affected low perceptions of disease risk in some settings.

### Despite more positive perceptions of the importance and efficacy of a COVID-19 vaccine, a significant proportion across the continent express concerns around vaccine safety

- Across most of the African countries surveyed, respondents tend to view new COVID-19 vaccines as less safe than vaccinations in general.
- In certain countries surveyed, such as Ethiopia, respondents reported feeling more informed. Perhaps linked to this, they express more confidence in the safety of COVID-19 vaccines.
- Ethiopia is one of the few countries surveyed, where respondents do not believe that a COVID-19 vaccine is less safe than general vaccinations, with over 8-in-10 (85%) agreeing that a COVID-19 vaccine and general vaccinations are safe.
- Over half of people surveyed across the 15 countries consider themselves either *not very well* or *not at all* informed about vaccine development.
- 60% of those who would reject the vaccine believe that it would not be safe, compared to just 16% among those who would accept it.

### Specific demographic and attitudinal groups show higher levels of skepticism towards a COVID-19 vaccine

- Demographically, those who are more skeptical towards COVID-19 vaccines tend to be young people, those who are unemployed, or those living in cities
- Women show higher levels of vaccine confidence in general, but they report being more skeptical when it comes to a COVID-19 vaccine.

 Respondents who do not know anyone who has tested positive for COVID-19, those who think the threat of COVID-19 is exaggerated, and those who believe in conspiracy theories are also more skeptical.

Nearly 2-in-3 (64%) respondents mention TV as one of their most trusted sources for information about COVID-19, followed by radio (51%), online sources (41%), health bodies (23%) and government sources (18%). This varies considerably by country, with the Western region citing radio as the most trusted information source(61%).

• Online channels, particularly social media, tend to be the most trusted source among hesitant groups

Misinformation (inaccurate, but not necessarily with bad intentions) and disinformation (inaccurate, with intention to deceive) regarding COVID-19 appears to be widespread, with those who self-report exposure to rumors also showing a higher propensity to believe them

- Among those surveyed, 2-in-3 (66%) respondents report having seen or heard at least some rumors about COVID-19, with 2-in-5 (42%) claiming to have been exposed to *a lot* of disinformation.
- Men tend to mention that they have seen or heard *a lot* of disinformation (45% vs. 38% of women), whilst some women feel they have had no exposure at all.
- People who say they would refuse a COVID-19 vaccine are significantly more likely to state that the disease does not exist (15%, compared to just 4% among those who would accept it).
- Men are significantly more likely than women to feel that the risks posed by COVID-19 are exaggerated.
- Countries reporting the lowest compliance with protective measures are also those where more people feel the threat from the virus is being exaggerated – Nigeria, Niger, DR Congo and Sudan.
- Overall, more than 1-in-4 (27%) feel that no groups should be prioritised, and that the vaccine should be available to all
- Almost 1-in-2 respondents believe that COVID-19 is a planned event by foreign actors. Most countries report seeing stories on China, Senegal (62%) and Sudan (49%) are most likely report exposure to stories linking U.S. to the cause of the virus than in other countries surveyed (35% overall).

### 2.2 Experience and Perceptions of COVID-19

Data collected in this survey suggest that many in Africa do not feel the Coronavirus (COVID-19) outbreak poses a significant threat to them, and only a minority know anyone who has tested positive for the disease. In some countries, significant minorities believe that the disease was man-made, and some suggest it does not exist at all. Despite these reservations, however, many report observing promoted protective behaviors such as washing hands and wearing face coverings, while some report taking supplements and medicines that they believe protect them from the disease.

### 2.2.1 Perceived threat of COVID-19

More than half of respondents surveyed feel that the threat from Coronavirus is exaggerated, and that it therefore does not pose as great a risk as some have suggested. This opinion was particularly prevalent in countries such as Niger (79%), Sudan (73%), Nigeria (67%) and DR Congo (65%).

Conversely, respondents in Tunisia and Morocco were most likely to disagree that the risks posed by the disease are exaggerated, suggesting a more cautious approach which is reflected in their responses on other questions.

Men are significantly more likely than women to feel that the risks posed by COVID-19 are being exaggerated, and the belief is also more prevalent among younger people (44 and under) than older people (45 and over). Those who express belief in conspiracy theories and those who cite social media as a trusted source are also significantly more likely to believe that the threat is being exaggerated.





Both those who *strongly agree* that vaccines are safe and those at the opposite end of the scale who *strongly disagree* that vaccines are safe, are more likely to view fear of the disease as overblown than those with more middling views of vaccine safety.

### Figure 2.2.1: Agreement 'The threat of coronavirus is exaggerated'



### 2.2.2 Personal experience of COVID-19

Figure 2.2.3 Proportion who know anyone who has tested positive for COVID-19



Across the 15-country study, fewer than 1 in 5 survey respondents personally know anyone who has tested positive for COVID-19 and, among those who do, it is much more likely to have been a distant connection than a friend, family member, or colleague. Two things must be taken into account here. One is that testing was not widely available at the time of the survey, and second, since the survey there has been a more serious second wave of COVID-19 illness and death.

## Figure 2.2.4 Who has tested positive (among those who know someone)



Respondents in Tunisia, South Africa, Kenya and Sudan were significantly more likely to report knowing someone who has tested positive than elsewhere. This may reflect a higher frequency, or availability of testing. When it comes to having someone reported to have tested positive within the respondent's own household, figures are more consistent across the 15 countries, ranging from less than 1% to 8%.

Reflecting their more personal experience of the disease, this sub-group who do know someone who tested positive (19% of the total sample) are significantly less likely to feel that the threat of COVID-19 is being exaggerated than those who do not know anyone who has tested positive. This difference is particularly marked among those who had a family member who had a positive COVID-19 test, in which case they were far more likely to disagree that the threat is being overblown.

Although the number of respondents who claim to have tested positive themselves is small (n = 110 across 15 countries, or less than 1% of the sample) there are some interesting indicative findings as they appear to exhibit some typical characteristics of 'survivor bias'. In short, someone who has tested positive for coronavirus is as likely to say that the threat of the disease is exaggerated as someone who has no positive tests among their acquaintances (58% and 59%, compared to 53% among those who know someone who has tested positive). Those who have had a positive test themselves are also most likely to reject any approved vaccine (19% would refuse, the same as among those who do not know anyone with a positive test, compared to 12% among those who do).



### Figure 2.2.5 Proportion who know anyone who has tested positive for COVID-19

### 2.2.3 Awareness and understanding of COVID-19

At the overall level, most people are aware that COVID-19 is caused by a virus (66%). However, notable minorities buy into prominent conspiracy theories that claim the disease is man-made (23%), or that it does not exist at all (6%).

### Figure 2.2.6: Proportion saying statement is true



Rejection of the 'received wisdom' surrounding coronavirus varies significantly between countries. In Morocco and DR Congo, around 1-in-3 respondents believe that COVID-19 is man-made (35% and 32% respectively), as do 1-in-4 in South Africa (27%). Respondents in Nigeria are significantly more likely than those elsewhere to suggest that the disease does not exist (18%), reflecting the highly skeptical views expressed at several measures.

Sub-group analysis shows that the belief that COVID-19 is man-made is significantly higher among men, and that it seems to increase with education level; those who have received only a primary education or less are the

least likely to believe it and those with a tertiary education are most likely. There may also be a correlation with skepticism in other areas as those who do not feel that vaccines are safe are more likely to believe the disease was man-made.

Respondents who believe coronavirus-related conspiracy theories (tested in the survey) are also nearly twice as likely to believe the disease to be man-made than those who do not believe such stories (30% vs. 17% respectively).

### 2.2.4 Behavior changes

Regardless of personal attitudes towards the virus and its coverage in the media, the data show that some of the most widely promoted protective measures are being widely observed; more than 8-in-10 report that they are washing their hands more regularly than they were before the pandemic, and nearly 6-in-10 are wearing a face covering more often (see figure 2.2.8). However, data suggest that many respondents continue to socialize as before, despite public health advice to the contrary. At the overall level, only a minority report that they have reduced the frequency with which they host guests in their home or gather in large groups to socialize since the outbreak began.

Predictably, the countries reporting the lowest observation of protective measures are also those where more people feel that the threat from the virus is being exaggerated – Nigeria, Niger, DR Congo and Sudan. An example can be seen in figure 2.2.9.







#### Figure 2.2.8 Change in frequency of behaviour since start of the pandemic

Respondents in Nigeria, Niger, DR Congo and Sudan are also significantly less likely to report reducing their social contact - only 1 in 5 (or 1 in 4 in the case of Sudan) report that they are having guests in their houses less regularly than they were prior to the pandemic. It is worth noting that official restrictions and recommendations varied across the 15 countries included in this study and observation of some of the measures mentioned above could therefore be expected to vary significantly, e.g., if face coverings were mandatory in public places, or if large gatherings were officially banned.

Overall, just over 1-in-10 respondents reported that they are taking some kind of supplement or other treatment to protect themselves against COVID-19. This varied by country from just 1-in-20 in Nigeria (6%) to 1-in-5 in South Africa (21%) and was more common among women and older people. Interestingly, there is no significant difference across this measure between those who would accept a COVID-19 vaccine and those who would not. However, those who personally know someone who has tested positive for COVID-19 are nearly twice as likely to be taking supplement or medication than those who do not know anyone. People who do not feel that vaccines are safe, and those that express belief in conspiracy theories are also more likely to be taking something, possibly reflecting a preference for natural remedies and alternative medicines.

Some of the most frequently mentioned supplements include herbal remedies (including ginger and garlic), citrus fruits such as oranges and lemons, and hot drinks. These natural supplements were preferred to over-thecounter medicines, but chloroquine was named specifically in a number of countries.





### 2.3 Vaccine Awareness and Attitudes

## 2.3.1 Reported willingness to accept of COVID-19 Vaccine

Nearly 4-in-5 respondents in the total sample reported they would take a publicly available vaccine, if it were deemed safe and effective. Nonetheless, almost 1-in-5 respondents say they would not take the vaccine, even if it were safe and effective. But these number varied considerably across countries, and likely mask further differences at sub-national level.

## Figure 2.3.1 Reported willingness to accept a new COVID-19 vaccine



Ethiopia, Niger and Tunisia reported the highest levels of willingness to take a COVID-19 vaccine (over 9-in-10 in these countries) compared to less than 6-in-10 in DR Congo.

Nigeria falls into the bottom half of countries in terms of

willingness to take a COVID-19 vaccine (76% say they would get it) but returned high scores for confidence in the importance, safety and efficacy of vaccines in general. Data reported elsewhere in this survey suggest that in Nigeria, in particular, questions remain over the need for this vaccine, despite general acceptance of vaccinations to protect against other diseases.

Men are more likely to report they would take a COVID-19 vaccine (80%) compared to women (78%). This is consistent with global studies in which women tend to be less inclined to vaccinate.

Overall, the reported willingness to accept a new vaccine among different age groups corresponds with their general confidence in vaccines: the older generations are more inclined to take a COVID-19 vaccine compared to younger ages. The latter also tend to be more vaccine hesitant. However, considerable variations exist across the different countries surveyed. This is covered in greater detail in section 2.5 of this report.

In terms of education and employment, respondents with a secondary level education are less likely to accept a COVID-19 vaccine (78%) compared to those with a primary education (81%) and university graduates (80%). Those who are unemployed reported being less willing to take the vaccine (77%) than respondents who were working (80%).



### Figure 2.3.2: Reported willingness to accept a new COVID-19 vaccine across Africa

### 2. Key Findings | 2.3 COVID-19 Vaccine Awareness and Perceptions

Furthermore, the reported willingness to accept a new COVID-19 vaccine is much higher among people who live in villages, compared to those who live in big cities. This mirrors general vaccine confidence among these groups, as those who live in urban areas tend to be slightly more vaccine hesitant.

## Figure 2.3.3: Proportion of people who would take a new COVID-19 vaccine (according to settlement size)



## 2.3.2 Reported willingness to accept a COVID-19 Vaccine: Attitudinal Groups

In researching reported willingness to accept a COVID-19 vaccine, those least likely to accept is linked to use of social media, exposure to mis- or disinformation and conspiracy theories, and whether there was direct experience of the virus and general vaccine confidence.

Reported willingness to accept a COVID-19 vaccine is lower among those who report having seen or heard rumors about COVID-19 that seem untrue (78%, compared to 81% of people who report not seeing much or any disinformation). Similarly, respondents who believe some of the common conspiracy theories about COVID-19 are significantly less likely to take a COVID-19 vaccine (75% say yes, compared to 83% of those who do not believe in any of the conspiracy theories).

Direct experience of COVID-19 in the form of a friend or family member testing positive appears to increase people's likelihood to take a new vaccine against it. 85% of those who know someone with a positive COVID test say they would take the vaccine, compared to 78% of people who do not know anyone.

The most striking divergence in attitudinal groups can be found between those who agree that vaccines in general are safe and those who disagree with this statement. The difference is more noticeable on the safety aspect of vaccines, when compared to ratings on the importance and efficacy of vaccines.

Figure 2.3.4: Proportion of people who report willingness to accept a new COVID-19 vaccine



Across the continent, 1-in-5 (18%) respondents say they would refuse a COVID-19 vaccine. When asked why, the most common response is a lack of trust in the vaccine. Some of these respondents do not trust vaccines in general, but others show specific distrust towards a COVID-19 vaccine For example, one comment from a respondent in Niger argued that, *'given the rumors that have been circulating, we cannot be certain that it will be good for us'.* 

## Figure 2.3.5 Top 5 most common reasons given for not wanting to take a new COVID-19 vaccine

- 1 I do not trust the COVID-19 vaccine
- 2 I do not believe that the virus exists
- 3 I am concerned about the safety of the vaccine
- 4 I do not feel that I am at risk of catching the virus
- 5 I do not have sufficient information to make a decision

#### 2. Key Findings | 2.3 COVID-19 Vaccine Awareness and Perceptions

People who say they would refuse a COVID-19 vaccine are significantly more likely to state that the disease does not exist (15%, compared to just 4% among those who would accept it) and many mention rumors and conspiracy theories about COVID-19 when explaining why they would refuse a vaccine. In DR Congo, the perceived non-existence of COVID-19 virus is the most common reason giving for not wanting to take a COVID-19 vaccine.

In Côte d'Ivoire, where few know anyone who has tested positive for COVID-19, the most frequent explanation given for not wanting to take the vaccine is the belief that they are not personally at risk of catching the virus.

Many of the reasons provided for rejecting the vaccine can be brought back to concerns, either implicit or explicit, about vaccine safety. 60% of those who would reject the vaccine believe that it would not be safe, compared to just 16% among those who would accept it. This stark difference shows how central the question of safety is to acceptance of any new vaccine.

### 2.3.4 Development of a COVID-19 Vaccine

### Figure 2.3.6: Confidence in a new COVID-19 vaccine



People overwhelmingly agree on the importance of a COVID-19 vaccine but are less sure of its safety and effectiveness. Compared to general vaccine confidence, respondents' trust in a new COVID-19 vaccine is lower. This is particularly noticeable with the issue of safety, as 4 in 5 (78%) respondents agree that vaccines in general are safe but only 2 in 3 (68%) say the same about a new COVID-19 vaccine.

With regards to the development of a COVID-19 vaccine, respondents were asked how well informed they felt on the subject. Over half of people surveyed consider themselves either not *very well* or *not at all* informed

about vaccine development.

Age, gender and education all appear to have an impact on how informed people feel about the development of a COVID-19 vaccine. Interestingly, groups who are generally more vaccine hesitant are also more likely to say they feel well informed: men and those with university education all report higher levels of being well informed.

### 2.3.5 Confidence in COVID-19 Vaccine Safety

Respondents were asked which organizations, bodies or professionals would need to provide their approval in order for them to trust that a COVID-19 vaccine could be deemed safe and effective. Overall, 3-in-5 (59%) respondents would trust the vaccine if it were approved by the World Health organization. Government healthcare workers and host governments are also seen by many respondents as trustworthy when it comes to approving a new COVID-19 vaccine.

These perceptions, as with others in the survey, were highly variable across the 15 countries.

## Figure 2.3.7: organizations perceived to be important for approving COVID-19 vaccine safety



Nonetheless, regional differences are evident, suggesting that a country-specific approach would be necessary when advocating for the safety and effectiveness of a new COVID-19 vaccine.

Africa CDC is the most popular in Tunisia, where 1-in-3 (34%) respondents mention this body as one of their most trusted organizations. Elsewhere, Africa CDC scores lower, indicating that the organization is not as well known in other regions. Two points to consider here. Africa CDC is a relatively new organization established in 2016, and, secondly, the role of Africa CDC is not to issue approvals on vaccine safety and efficacy which is more a function of WHO. Africa CDC works closely with governments to support public health measures, risk assessment, early warning and surveillance and emergency responses

### 2.3.5 Priority Groups for COVID-19 Vaccine

When it comes to the delivery of a vaccination programme for COVID-19, respondents differ greatly as to whom they feel should be prioritised. Healthcare workers and the elderly are most likely to be prioritised by respondents. Overall, more than 1-in-4 (27%) feel that no groups should be prioritised, and that the vaccine should be open to all.

### Figure 2.3.8: Priority groups for COVID-19 Vaccine







MOR TUN NGA SUD RSA NGR CDI DRC ETH BKF KEN SEN UGA GAB MAL

## 2.4 Information Sources and COVID-19 rumors

### 2.4.1 Most trusted information sources

Across the 15 countries surveyed, nearly 2-in-3 (64%) respondents mention TV as one of their most trusted sources for information about COVID-19, followed by radio (51%), online sources (41%), health bodies (23%) and government sources (18%).

Figure 2.4.1: Top mentions of most trusted sources



Findings vary greatly by region. Those surveyed in North Africa, i.e., Morocco and Tunisia, are more inclined to cite government sources and healthcare bodies as one of their most relied on information sources.

Figure 2.4.2: Top mentions of healthcare and government sources – By Country



Demographic and attitudinal differences are also evident. The older the respondents the more likely they are to mention healthcare bodies as one of their top trusted information sources. Those with positive attitudes and behaviours towards vaccinations, both in general and towards a COVID-19 vaccine, tend to mention healthcare bodies and government sources as one of their most trusted sources.

## Figure 2.4.3: Subgroups most likely to mention Healthcare sources

55+	25%	of those <b>aged 55 or above</b> vs. 20% of those between the ages of 18 to 24
	24%	of those <b>willing to take the</b> <b>COVID-19 vaccine</b> vs. 18% of those who are not willing
V Jent	25%	of those who have <b>taken any</b> <b>vaccines</b> vs. 14% of those who had never taken any vaccines

Except for the Western region, where radio is the most popular source (62% vs. 51% overall), over two in five respondents in other regions depend on online sources, with social media making up a significant proportion. Though the Northern region shows high confidence in online sources, this is predominantly driven by Moroccans (56%), while Tunisians (29%) fall in the group that are least likely to mention digital platforms.

Demographically, online sources tend to be mentioned by men and young people, i.e., those below the age of 25. Respondents who demonstrate vaccine hesitancy and higher susceptibility to seeing and believing disinformation are more inclined to consult online sources than their respective counterparts.

Figure 2.4.4: Subgroups most likely to mention online sources (including social media and the Internet)



Several countries mention more unofficial sources. In Niger, almost half (46%) of respondents trust their friends or family, while 1-in-5 (22%) cite WhatsApp. These two sources may be interlinked as the communication platform is likely to be used to share information with friends and family.

Countries reporting the lowest observation of protective measures are also those where more people feel the threat from the virus is being exaggerated – Nigeria, Niger, DR Congo and Sudan

### 2.4.2 Exposure to general disinformation

In the survey, respondents were asked to share whether they believed they had been exposed to any untrue stories, i.e., any disinformation relating to the virus. Bearing in mind that this evaluation of whether stories were accurate or not was made by respondents themselves, survey data shows that 2-in-3 (66%) respondents report having seen or heard at least some rumors about COVID-19, with 2-in-5 (42%) claiming to have been exposed to *a lot* of disinformation.

## Figure 2.4.5: Self-reported exposure to disinformation



Again, demographic and attitudinal differences are evident:

- Respondents from Senegal (88%) and Sudan (85%) are more likely to report exposure to *at least some* disinformation (vs. 66% overall).
- Men tend to mention that they have seen or heard a lot of disinformation (45% vs. 38% of women), whilst women feel they have had no exposure at all. This may be linked to male respondents' tendency to consult online platforms as one of their key trusted information sources.
- Those who believe the threat from COVID-19 is exaggerated tend to feel at least somewhat exposed to rumors about the pandemic (71% vs. 59% of those who disagree that the threat is exaggerated).
- The same holds true for those who believe in conspiracy theories (72%) - 10 percentage points higher than for those do not believe these (62%).
- Respondents identified as vaccine confident on the other hand, feel they have had *little* to *no* exposure (33%) to disinformation compared to their hesitant counterparts (27%).

In addition to gauging wider exposure to general disinformation, respondents were asked whether they had seen specific rumor stories – though these were not explicitly referred to as untrue news or disinformation. The majority of respondents mention seeing stories which portray China as the root cause of COVID-19 (71%), followed by similar stories about the U.S. (35%). Again, findings vary by country. While most countries

report seeing stories on China, Senegal (62%) and Sudan (49%) are most likely report exposure to stories linking U.S. to the cause of the virus than in other countries surveyed (35% overall).





Despite no explicit reference to these stories as disinformation, those who are vaccine hesitant, those have not taken any vaccines and those who believe in conspiracy theories are significantly more likely to be aware of these news stories, which suggests that these groups are more susceptible to being exposed to and believing disinformation around vaccinations, as suggested by findings in Section 2.4.3. It may also be the case that these groups are more likely to actively seek out news that reinforces existing negative views held around vaccinations.

Of those exposed to these specific disinformation stories, 3-in-5 (62%) mention discussing them with friends and family. Men and young respondents are more inclined to have shared these within their immediate circles. Those who are skeptical about vaccines and their safety or those who believe in conspiracy theories express a higher propensity to share these stories, most likely online on their most trusted platform.





### 2.4.3 Reported belief in specific disinformation

In addition to testing whether respondents had seen or heard certain COVID-19 specific disinformation stories, respondents were asked whether they considered a series of false statements to be true or not. These statements included several highly publicised rumors circulating in Africa, including stories claiming that COVID-19 vaccine trials had resulted in the deaths of children and that there is a link between 5G and the Coronavirus.

Around 2-in-5 respondents across the region surveyed are able to correctly identify most of the rumor statements to be incorrect, increasing to nearly a half for the rumors linking the virus to 5G and the one linking vaccine trials to the death of children. Furthermore, rather than having a clear-cut view, the data suggest that a small but significant proportion of respondents tend to feel uncertain about what to believe, feeling more inclined to choose a 'don't know' response.

Nonetheless, Figure 2.4.8 shows that almost 1-in-2 respondents believe that COVID-19 is a planned event by foreign actors. Given that the majority of respondents report exposure to stories describing China, and to a

lesser extent U.S, as the main perpetrators in the spread of the virus, this indicates respondents' propensity to believe the rumors they see.

In terms of regional differences, respondents from the North African region surveyed, particularly Tunisians, tend to believe these stories more than those from other regions. Again, men are more likely to consider these stories to be *definitely* true, compared to women. The same holds true for young respondents, aged 18 to 24. Those who believe that the threat from COVID-19 is exaggerated, those who are reluctant to take a COVID-19 vaccine, and those who primarily trust social media are more susceptible to believing these stories.

## Figure 2.4.8: Proportion saying they believe rumors relating to COVID-19





### Those more likely to believe rumors



Those from Northern region, Tunisia



Male respondents



Younger respondents



Those who are generally sceptical about vaccines



Those who mention social media in their top trusted sources

## 2.4.4 Exposure to fact-checking information about COVID-19

When asked whether they had seen or heard any stories that attempted to disprove incorrect information about COVID-19, 1-in-2 (51%) respondents across the 15 countries say they had not seen such information (referred to as disinformation-targeting in this section).

Figure 2.4.9 Report having seen or heard disinformation-targeting facts



Nonetheless, just under a half (47%) claim to have seen such information aimed at disproving untrue stories. Those who report having seen *at least* some disinformation tend to believe that they have also seen disinformation-targeted news. This suggests that these respondents are perhaps actively consulting fact-checking sources. Yet, as previously explained, it might may be a case of individual, subjective evaluation of which stories are deemed to be true or not. This is supported by the fact that demographic and attitudinal groups which show a higher tendency to see, share and believe disinformation also seem more inclined to say that they have seen disinformationtargeting.

Among those who claim to have seen disinformation-

targeting messaging (47%), the majority mention viewing these on social media platforms (59%). 1-in-5 (20%) have received such information from government sources, dropping further for healthcare professionals (15%) and community organizations (10%).

Community organizations are most frequently mentioned by Congolese respondents, and more widely in the Central region surveyed. Given that friends and family as well as WhatsApp are the most trusted sources in Niger, it is perhaps unsurprising that most disinformation-targeting is reportedly received by 'word of mouth' in this country.

Respondents' top trusted media sources are aligned with the sources on which respondents report seeing disinformation-targeted messaging. Older respondents tend to rely on government and healthcare sources; in line with this, they are more likely to mention seeing disinformation-targeted facts from these two sources.

Younger respondents who rely more heavily on online sources are more likely to mention social media when it comes to disinformation-targeting. Those who think vaccines are unsafe as well as those who have not had vaccinations tend to get their disinformation-targeting from social media.



### Figure 2.4.10: Where disinformation-targeting is seen

## 2.5 Vaccine Confidence and the Impact of COVID-19

### 2.5.1 General Vaccine Confidence

Overall, 4-in-5 respondents agree that vaccines in general are important and effective. Nonetheless, respondents are less confident about vaccine safety (78% agree they are safe). Data suggest considerable variation in vaccine confidence across the different countries surveyed. The most noticeable trend for vaccine hesitancy is among respondents in DR Congo. Only 65% of people in DR Congo agree that vaccines are important, while 7-in-10 think they are safe (71%) or effective (74%). At the other end of the spectrum, Morocco has the highest proportion of people surveyed who agree that vaccines are important (97%). However, significantly fewer respondents from Morocco are convinced that vaccines are safe (78%) and effective (78%).

Figure 2.5.1: Proportion who agree that vaccines in general are important, safe or effective – by gender



Interestingly, in comparison to global studies which suggest that women are in general more vaccine hesitant, in Africa they tend to be more confident than men in the safety and effectiveness of vaccines.

When it comes to different age groups, data on general vaccine confidence conform to the trends observed for attitudes towards a COVID-19 vaccine: older respondents are more likely to trust general vaccinations.

Figure 2.5.2: Proportion of people who agree that vaccines in general are important, safe or effective –



People with primary level education or below are more likely to show confidence in the importance, safety and effectiveness of vaccines – though again this varies by region (See section 3 – Country Reports). This suggests that tackling disinformation around vaccines and increasing awareness on the benefits of vaccination may not simply be a question of education, as those with a higher education tend to be more skeptical about vaccines. This is consistent with other research globally.

Vaccine confidence also seems to be influenced by geography. People who live in villages are generally report being more confident on the safety of vaccines than those who live in cities.



#### Figure 2.5.3: Proportion of people who agree that

### 2.5.2 Impact of COVID-19 on Vaccine Confidence

In the survey, respondents were asked whether the global Coronavirus outbreak has made them more or less likely to vaccinate themselves in general. Almost half of respondents report that they are now *more* likely to vaccinate, with the highest proportions in Ethiopia (87%) and Sudan (69%).

However, the pandemic has pushed some people in the opposite direction, with 1-in-6 (overall) declaring that they are now less likely to vaccinate than before the outbreak. Nonetheless, 1-in-3 state that the pandemic has not changed their views on vaccines.

Looking at vaccine confidence in each country, there is a noticeable variation in the impact of COVID-19, as shown in Figure 2.5.4. At least 1-in-5 respondents in South Africa, Côte d'Ivoire, DR Congo, and Senegal report that they are now less inclined to vaccinate. Further qualitative research may shed light on the varying impact of COVID-19 on vaccine confidence across these different countries, also taking into account that the COVID-19 vaccine is initially targeting adults while routine vaccination is primarily targeting children.

Findings are consistent across both genders, suggesting similar impact for men and women. In terms of age

groups, however, a greater proportion of those aged 55 or over are now more likely to vaccinate (53%) in comparison to other age groups. Conversely, 1-in-6 respondents under the age of 34 say they are now less inclined to vaccinate themselves. Thus, it appears that COVID-19 has had the greatest negative impact among age groups that were already more vaccine hesitant.

Having a direct experience of COVID-19 seems to increase the likelihood of people vaccinating themselves. A greater proportion of respondents who know someone who has tested positive for COVID-19 say they are now more likely to vaccinate, compared to those with no experience of the virus. Interestingly, having a family member test positive for COVID-19 appears to have a greater positive impact on people's willingness to vaccinate, than personal experience of the virus.

It seems that the pandemic and associated public discussion around the pandemic has exacerbated existing views. Those who disagree that vaccines are safe in general are more likely to have been put off vaccinations, while those who view them as safe are more likely to say the pandemic would encourage them even more to pursue vaccination. These safety concerns are explored further in the following section.







Figure 2.5.5: Respondents who think all vaccines are not safe compared to respondents who think a COVID-19 vaccine would not be safe

### 2.5.3 Vaccine Safety Concerns and COVID-19

The issue of safety is the most striking difference between general vaccine confidence and confidence in new COVID-19 vaccines. When respondents were asked whether they agree that vaccines in general are safe, only 18% disagreed with this statement. However, when asked about the safety of a COVID-19 vaccine, a quarter of people disagreed that it would be safe. This perceived lack of safety of a COVID-19 vaccine is apparent across all countries surveyed, with the exception of Ethiopia. Indeed, in Morocco, Cote d'Ivoire, DR Congo and Senegal, over a third of respondents believe a COVID-19 vaccine would be unsafe.

The much higher levels of doubt about the safety of a COVID-19 vaccine, compared to general vaccinations are evident across all genders, age groups and educations levels. Young people, those with a secondary or university education, and people who live in big cities are more likely to believe that a COVID-19 vaccine is unsafe. Skepticism about the safety of the COVID-19 vaccine is also higher among people who use social media as a trusted source of information, those who believe COVID-related conspiracy theories and people who report seeing disinformation about the virus.

The starkest jump in concerns over safety can be observed among those who say they would refuse a COVID-19 vaccine if it became publicly available. Indeed, 60% of those who would refuse it believe the COVID-19 vaccine would be unsafe, whereas only 37% in this group think that vaccines in general are unsafe.

Figure 2.5.6: Impact of safety concerns on reported willingness to accept a COVID-19 vaccine



- Believe vaccines in general are unsafe
- Believe a COVID-19 vaccine is unsafe



## Results by Country

## 3

3.1	Burkina Faso
3.2	Côte d'Ivoire
3.3	Democratic Republic of the Congo
3.4	Ethiopia
3.5	Gabon
3.6	Kenya
3.7	Malawi
3.8	Morocco
3.9	Niger
3.10	Nigeria
3.11	Senegal
3.12	South Africa
3.13	Sudan
3.14	Tunisia
3.15	Uganda



## 3.1 Burkina Faso

## 3.1.1. Reported willingness to accept of COVID-19 vaccine

Reported willingness to accept a COVID-19 vaccine is high in Burkina Faso, with nearly 9-in-10 respondents (86%) saying they are willing to take it, but safety concerns remain.

Reported willingness is consistent across both genders, though some regional differences are evident. In line with a general trend across this 15-country study, people living in bigger cities, including the capital, tend to be more hesitant towards a COVID-19 vaccine than those living in rural areas or villages.

Education level also plays a key role, as those who have completed primary education seem more accepting of a COVID-19 vaccine than those who hold tertiary qualifications.

## 3.1.2 Overall and COVID-19 specific vaccine confidence

Reported willingness to accept COVID-19 vaccination reflects the high levels of vaccine confidence in Burkina Faso, where over 8-in-10 agree that vaccines in general are important (87%), safe (83%) and effective (85%). Unlike several other countries surveyed, where belief in the importance of vaccination is high, but reduces significantly for safety and effectiveness, this is not the case in Burkina Faso.

Though confidence in vaccination in general and towards a COVID-19 specific vaccine is high, Burkina Faso is among the countries that are considerably less likely to believe that a COVID-19 vaccine would be safe (69%) when compared to vaccines in general (83%). Only 1-in-5 respondents in Burkina Faso feel they are well informed about the development of a COVID-19 vaccine (vs. 40% overall).



1 <sup>st</sup> Confirmed	Total confirmed	Confirmed deaths
COVID-19 case	cases as of 23 Dec	as of 23 Dec
March 11, 2020	5,461	77

Reported willingness to accept a new COVID-19 vaccine











<sup>1</sup> Figures for COVID-19 cases taken from WHO

Those with primary school education or below tend to display considerably higher confidence in vaccines than those with tertiary education. This may be due to the fact that younger people report more exposure to disinformation on social media and tend to show slightly less favourable views towards vaccines (See section 3.1.3).

Half of respondents in Burkina Faso say their views on general vaccinations has not changed as a result of COVID-19. Still, over 1-in-3 (36%) claim that the pandemic has now made them more likely to vaccinate in general.

#### 3.11.3 Disinformation

Around half of Burkinabé respondents (49%) report exposure to *at least some* disinformation. As observed across the 15-country study, men and younger respondents are more likely to report seeing made-up stories compared to their respective counterparts.

Compared to the average respondent across the 15country study, Burkinabé respondents were less likely to report exposure to specific rumor stories that portray people from Africa as victims and foreign actors as perpetrators, with 3-in-10 (31%) respondents saying that they have not heard any of the stories tested in the survey.

Despite this, a considerable proportion seem to consider these rumor statements to be true. 2-in-5 (42%) believe COVID-19 is a planned event by foreign actors or that a discriminatory policy is adopted in choosing people for vaccine trials in Africa, i.e., only the poor and less educated (38%), while 1-in-2 also think that people in Africa are being used as guinea pigs.

Across these rumor statements, men were significantly more likely to believe these stories than women. Similarly, younger respondents, i.e., those under the age of 25 were also more susceptible to believing rumors than those aged 55 or over.

Perceptions of Vaccine Safety



Likelihood to vaccinate in general as a result of COVID-19



■NET: More likely ■NET: Less likely ■No change in views ■DK/ REF







## 3.1.4 Trusted information sources on COVID-19 vaccine

As observed in most of the other Western African countries surveyed, Burkinabé respondents tend to rely mostly on radio (73% vs. 51% overall), followed by national television (47%) and social media (24%). 1-in-5 (22%) also depend on information from family and friends.

Men tend to rely on social media more heavily than women (29% vs. 19% of women) and younger respondents (33% for those aged 24 and under vs. 4% for those aged 55 and over). In contrast, women are more likely to rely on informal sources (25% say family and friends vs. 18% among men).

Respondents in this country show little confidence in official sources, including healthcare authorities (8% vs. 23% overall) and government sources (6% vs. 18% overall).

In line with the trend observed across most Western African countries, healthcare workers are held in high esteem by respondents in Burkina Faso. 1-in-2 (49%) want doctors and nurses to approve a new COVID-19 vaccine in order to feel reassured about its safety and

effectiveness (vs. 38% overall).

Another 2-in-5 mention the WHO (39%) and host government (40%).

As seen across Western African countries surveyed, a collaborative effort between these different international, national and local bodies would probably be best received by citizens in Burkina Faso when it comes to disseminating vaccine messaging.



## 3.2 Côte d'Ivoire

### Summary

The majority of Ivorians express willingness to take a COVID-19 vaccine. Contrary to wider survey findings, which suggest consistent reported willingness to accept across genders, in Côte d'Ivoire women tend to be slightly more skeptical than men.

Using a combination of traditional media, such as national TV and radio as well as social media may help disseminate a vaccine campaign more widely across Côte d'Ivoire.

## 3.2.1. Reported willingness to accept a COVID-19 vaccine

Reported willingness to accept a COVID-19 vaccine is high (71%) in Côte d'Ivoire, which is lower than the average across the 15-country study (79%). 3-in-10 Ivorians are either reluctant (25%) or uncertain (4%) about taking a novel vaccine against coronavirus.

Men are considerably more likely to accept a COVID-19 vaccine (76% vs. 65% of women). This contrasts with wider survey data, where willingness to accept a COVID-19 vaccine is consistent across genders, but reflects broader global trends in Europe and the U.S. where women tend to be more skeptical towards vaccinations.

Those who rely on social media as one of their most trusted sources also show higher willingness to take a COIVD-19 vaccine. This highlights the opportunity that social media presents in disseminating and engaging relevant audiences, though as overall findings show, these digital platforms also appear to be one of the key drivers spreading disinformation on vaccines., which must be considered when designing effective social media outreach.

## 3.2.2 Overall and COVID-19 specific vaccine confidence

Though a majority of Ivorian respondents think that vaccines in general are important, safe and effective, confidence ratings are lower than the overall average across the 15-country study.

Men are significantly more likely to *strongly* agree that both general vaccinations and COVID-19 vaccines are important, safe and effective, when compared to women.

Those who believe in conspiracy theories tend to show lower vaccine confidence, both in general and more specifically towards a vaccine against COVID-19.



Reported willingness to accept new COVID-19 vaccine



% saying 'yes' to accepting a COVID-19 vaccine – By Gender & Trust in social media







<sup>1</sup> Figures for COVID-19 cases taken from WHO

#### COVID-19 Vaccine Confidence - Côte D'Ivoire

### 3.2.3 Disinformation

Ivorians are much more likely to say that they have seen *a lot* of disinformation than the average respondent across the 15-country study (54% vs. 41% overall). This may be related to the fact that 2-in-3 respondents (66%) believe that the threat from coronavirus is exaggerated.

Despite this, Ivorians are significantly less likely to report exposure to the rumor stories, tested in the survey. Almost 3-in-10 (28%) said they had not seen or heard any of the stories. Just over half had heard stories that claim China had spread the virus deliberately (54% vs. 73% overall); and a lower proportion claim the same about similar stories about the U.S. (24% vs. 35%). There is also less appetite to share these stories in Côte d'Ivoire than in other surveyed countries, with nearly half (46%) indicating they have not shared such stories (vs. 36% across the 15 countries surveyed).

Despite this, a sizeable proportion of respondents believe in rumors around COVID-19. 2-in-5 Ivorian respondents believe that COVID-19 is a planned event by foreign actors (42%) and that African people are used as guinea pigs in vaccine trials (38%). A slightly lower proportion tends to think that the other Africa-related rumors are true (between 25-30%).

Across the rumor statements, men show a higher propensity to consider these stories to be true than women. While in other countries surveyed, men show more reliance on social media, this trend is not evident in Côte D'Ivoire where trust in these platforms is consistent across genders.

## 3.2.4 Trusted information sources on COVID-19 vaccine

In terms of trusted information sources on coronavirus, lvorians tend to prefer national television (68%), followed by radio (36%) and social media (33%).

In contrast to the wider survey data, respondents from Côte D'Ivoire are considerably less engaged with information from healthcare bodies (5% vs. 23% overall) and government sources (4% vs. 18% overall).

When asked who should provide their seal of approval for a new COVID-19 vaccine in order to reassure citizens that it is safe and effective, half of respondents mentioned the WHO, suggesting that the international healthcare body still carries weight amongst Ivorians, while just over 1 in 5 (22%) mention domestic healthcare workers (vs. 38% overall). Women are more likely to trust healthcare workers (25% vs. 19% of men). A third of respondents (33%) also mention the national government





## Organisations/ bodies that are deemed important for approving a COVID-19 vaccine



## 3.3 Democratic Republic of the Congo

### Summary

Compared to other countries surveyed in this study, reported willingness to take a new COVID-19 vaccine is considerably lower in DR Congo than in other countries in the study. Those who are unwilling to take a new vaccine frequently cite that they do not believe the virus exists.

Reported vaccine willingness varies considerably across the regions of DR Congo, with the lowest intent reported in Equateur. Reported willingness to accept is also lower among women and younger people.

In terms of trusted voices for a COVID-19 vaccine, women tend to trust healthcare workers, suggesting that doctors and nurses should be central to an engagement effort.

## 3.3.1. Reported willingness to accept COVID-19 vaccination

Across the 15-country study, DR Congo has the lowest reported willingness to accept a COVID-19 vaccine, with 3-in-5 (59%) saying they would take it.

Women and younger respondents under the age of 35, reported lowest willingness to accept COVID-19 vaccination, which reflects higher levels of general vaccine hesitancy among these demographic groups.

Vaccine confidence varies considerably across the regions of DR Congo, with 2-in-5 respondents saying they would take a COVID-19 vaccine. Vaccination intent in the capital (56%) is in line with the national average.

Like many countries surveyed across the continent, willingness to take the COVID-19 vaccine appears closely linked to the perception of vaccine safety. Intention to take a COVID-19 vaccine is higher among people who think vaccines in general are safe (67%), compared to those who disagree about their safety (39%).

Knowing someone who has had the virus also appears to influence reported willingness to accept a COVID-19 vaccine. 7-in-10 respondents who have an acquaintance with a positive COVID-19 test (72%) would accept the vaccine, in comparison to 3-in-5 (59%) who do not know anyone. This is perhaps unsurprising given that the most common reason for refusing the vaccine tends to be the belief that the virus does not exist.



Reported willingness to accept a new COVID-19 vaccine



% saying 'yes' to taking a COVID-19 vaccine – By Gender & Age Group



% saying 'yes' to taking a COVID-19 vaccine – By Region



## 3.3.2 Overall and COVID-19 specific vaccine confidence

Unlike the average respondent across the 15-country study, Congolese respondents appear less convinced about the importance of vaccines. 1-in-3 people surveyed (31%) disagree that vaccines in general are important. This is far higher than the overall average in the 15 country survey (15%).

Congolese respondents tend to show less confidence in a new COVID-19 vaccine, compared to general vaccination. This is particularly apparent when it comes to safety: 7-in-10 respondents think vaccines in general are safe, but 1-in-2 believe a COVID-19 vaccine would be safe. However, this varies across regions. Those in Kasai Occidental are twice as likely as those in Nord Kivu to believe that vaccines are safe.

When answering questions about the importance, safety and effectiveness of vaccines, respondents in DR Congo are more likely to give definite responses (i.e., *strongly* agree or *strongly* disagree) and less likely to give uncertain responses (i.e., *tend* to agree or *tend* to disagree) when compared to the average respondent across the 15-country study.

Despite these lower levels of vaccine confidence compared to wider survey findings, the COVID-19 pandemic does seem to have had a positive impact on likelihood to accept routine vaccinations. 1-in-2 respondents (48%) report being more likely to vaccinate themselves, while 1-in-5 (21%) are less likely to, and 1in-4 (26%) say their views remain unchanged as a result of the epidemic.

### 3.3.3 Disinformation

Self-reported exposure to disinformation appears high in DR Congo, with 7-in-10 respondents (73%) saying they have seen news which they deem to be untrue. This is considerably higher than the overall average across the 15-country study (65%). Interestingly, university graduates are more likely to say they have seen disinformation, which could perhaps be due to the fact that they tend to be younger and more receptive to rumors on social media or due to a general awareness that untrue rumor stories on the virus are widespread. Those who trust social media as one of their most credible sources on coronavirus are also more likely to report seeing disinformation.

General vaccine confidence – DR Congo



Perception of vaccine safety - Vaccines in general compared to a COVID-19 vaccine



COVID-19 Vaccine Confidence – DR Congo







Respondents from DR Congo were less likely to have seen some of the common COVID-19 rumors tested in the survey, and in turn were less likely to believe them, compared to the overall average.

## 3.3.4 Trusted information sources on COVID-19 vaccine

In comparison to the rest of the countries surveyed in Africa, DRC respondents reported that radio and social media are more popular forms of media for getting information on COVID-19. 3-in-5 (58%) trust the radio for their news, and over 1-in-3 (36%) trust social media as a news source.



## 3.4 Ethiopia

## 3.4.1. Reported willingness to accept a COVID-19 vaccine

Ethiopia reported the highest willingness to accept a new COVID-19 vaccine across the 15 countries surveyed, with over 9-in-10 (94%) saying they would be willing to take the vaccine. Regional differences are evident as the predominant majority in Tigray (97%) and Oromia (96%) say they would accept such a vaccine, while in Afar 87% reported willingness.

While reported COVID-19 vaccination intent is consistent across both genders, it varies across age groups. At the overall level, across the 15 countries surveyed, younger respondents reported *not* being willing to accept a new COVID-19 vaccine; the opposite holds true in Ethiopia, where those under the age of 25 are significantly more open towards taking a COVID-19 vaccine than their older counterparts.

## 3.4.2 Overall and COVID-19 specific vaccine confidence

Widespread reported willingness to accept a COVID-19 vaccine reflects the overall high levels of vaccine confidence in Ethiopia, where nearly 9-in-10 respondents agree that vaccines in general are important (89%), safe (85%) and effective (89%).

Ethiopia is one of the very few countries surveyed, where respondents do not believe that a COVID-19 vaccine is less safe than general vaccinations, with over 8-in-10 (85%) agreeing that a COVID-19 vaccine and general vaccinations are safe.

Being aware of the developments of a COVID-19 vaccine may be linked to the level of safety concerns expressed. 7 in 10 Ethiopian respondents report feeling well-informed (71%) on this matter, considerably higher than the overall average (40%), which may explain why the majority of Ethiopian respondents believe that a COVID-19 vaccine would be safe (vs. 68% overall).

This is supported by wider survey data, which suggests that those who are less informed tend to have more concerns around vaccine safety.

In addition to existing high vaccine confidence, Ethiopian respondents are significantly more likely to say that COVID-19 has made them more likely to vaccinate in general (87% vs. 49% overall).



1 <sup>st</sup> Confirmed	Total confirmed	Confirmed deaths
COVID-19 case	cases as of 23 Dec	as of 23 Dec
March 14, 2020	120,638	1,864

Willingness to accept a new COVID-19 vaccine







#### General vaccine confidence – Ethiopia



<sup>1</sup> Figures for COVID-19 cases taken from WHO

### 3.4.3 Disinformation

Ethiopia observes one of the lowest levels of selfreported exposure to disinformation across the Eastern African countries surveyed in this study, with 1-in-2 (48%) saying they have seen or heard at least some made up or untrue information about the coronavirus outbreak. Again, as seen at the overall level, men are more prone to claiming they have seen disinformation (52% vs. 44% of women).

Given the low reported exposure, 1-in-4 (26%) Ethiopians say that they have not heard any of the rumor stories on vaccines mentioned in the survey. Half of the respondents (52%) reported seeing stories that claim China caused and spread the virus, dropping to a quarter (26%) for similar stories about the U.S. 1-in-5 respondents have seen or heard rumors that depict people from Africa as victims or lab rats in vaccine trials, with around 5-10% reporting exposure to other rumors negatively linking people from Africa to vaccine trials.

Compared to the average respondent across the 15country study, Ethiopian respondents are less likely to consider these rumors to be true.

Across these rumors, younger respondents under the age of 25 are more susceptible to believing rumors than those aged 55 or over. This may be partially linked to the prevalence of disinformation on social media, which are favoured media channels by young people in general.

## Likelihood to vaccinate in general as a result of COVID-19



% believing rumors to be true



CDC Africa COVID-19 Vaccine Perceptions 2020

children

## 3.4.4 Trusted information sources on COVID-19 vaccine

Though a majority of Ethiopian respondents mention national television (75%) and radio (56%) as observed across the 15-country study, they are considerably more likely to also mention healthcare bodies, both international and domestic health professionals (34% vs. 23% overall) and the government (25% vs. 18% overall).

Those who do not know anyone who has tested positive for COVID-19 tend to trust radio (63% vs. 37% of those who do know some), suggesting that this group is best targeted on this channel to inform them about the consequences of the virus and the benefits of a COVID-19 vaccination. This is particularly key given that those without any exposure to positive COVID-19 cases tend to believe that the threat of the virus is exaggerated (61% vs. 48% of those who have acquaintances who have tested positive).

Younger respondents who are more susceptible to believing disinformation, which is widespread on social media, are best targeted on these digital platforms given that they most heavily rely on these for information on COVID-19.

Ethiopia falls among the countries that are most likely to consider the WHO as the most trusted body to approve the safety and efficacy of a new COVID-19 vaccine, with 3-in-4 (76%) saying they would be reassured about such a vaccine's safety and effectiveness if the WHO approved it.

Those who are skeptical about a COVID-19 vaccine due to not knowing anyone with a positive test would prefer the government to provide its seal of approval (28% vs. 18% of those who know acquaintances).



## 3.5 Gabon

### Summary

Reported willingness to accept a new COVID-19 vaccine in Gabon is relatively low, compared to the other countries surveyed. Almost 1-in-4 (23%) report that they would refuse to take a new vaccine, while 1-in-12 (8%) say they are uncertain.

Respondents with primary education or below are less likely to take the vaccine. Looking across the different regions of Gabon, predicted Reported willingness to accept is lowest in Ngounie and Nyanga, and highest in Ogeoue-Lolo.

Respondents in Gabon are more likely to trust social media, more so than in the rest of the African countries surveyed. Therefore, a vaccine messaging campaign would be most effective if disseminated via social media or television, which is also popular. Like in many other countries, the WHO is the most trusted voice for approving a new COVID-19 vaccine.

In addition, respondents who would refuse the vaccine tend to mostly trust doctors and nurses. It follows that the WHO and healthcare workers would be the most influential groups for reassuring people about taking a COVID-19 vaccine.

## 3.5.1. Reported willingness to accept a COVID-19 vaccine

The low reported willingness to accept a new vaccine observed in Gabon corresponds to generally lower vaccine confidence in the Central region of Africa. However, reported willingness to accept is much higher in Gabon, compared to DR Congo.

Across genders and the different generations, reported willingness to accept a COVID-19 vaccine remains consistent. However, younger respondents appear more uncertain about the vaccine, with 1 in 10 (10%) saying they do not know whether they would take a COVID-19 vaccine.

Interestingly, university graduates are more inclined to report willingness to accept a new vaccine, compared to people with primary or secondary education. This goes against the general trend observed in many other countries, suggesting more education and information about vaccines could help to persuade those who are hesitant about COVID-19 vaccines.





<sup>1</sup> Figures for COVID-19 cases taken from WHO

Reported willingness to accept the vaccine varies across the regions of Gabon, with the highest Reported willingness to accept in Ogeoue-Lolo (81%). Respondents in Ngounie and Nyanga are the least willing to take the vaccine (57% and 59%).

As observed in many other African countries, there is a strong link between the perception of safety and people's willingness to take a vaccine. Respondents in Gabon who think the COVID-19 vaccine is not safe are far less likely to express willingness to take it.

Attitudes towards the COVID-19 pandemic also play a role. Those who think the threat of COVID-19 is exaggerated or those who believe Covid-19 related conspiracy theories are more likely to refuse the vaccine. As observed across the wider survey, respondents with no exposure to anyone who has tested positive for the virus tend to also be less willing to take the COVID-19 vaccine. This suggests that, for some, vaccine hesitancy is linked to a lack of understanding and the perception that the virus will not affect them.

## 3.5.2 Overall and COVID-19 specific vaccine confidence

Respondents in Gabon are much more convinced about the importance of vaccines in general, than about their safety or effectiveness. This is consistent with the trend seen across the countries surveyed.

When assessing the impact of the pandemic on vaccine confidence, it is notable that half of respondents (50%) say there has been no change in their views towards vaccines. Furthermore, 3 in 10 respondents in Gabon (29%) report being more willing to vaccinate themselves now, as a result of the COVID-19 epidemic. It would appear that, COVID-19 has had less of a negative impact on vaccine confidence.

### 3.5.3 Disinformation

Looking at self-reported exposure to disinformation across Gabon, the proportion of respondents who say they have seen articles based on rumors (68%) is consistent with the continental average (65%). Younger respondents, those who live in big cities, and those who trust social media as a source of information are more likely to report seeing Covid-19 related disinformation.

Compared to the overall average, respondents in Gabon are more likely to have seen rumors relating to China creating and spreading the virus (78%), stories that people in Africa are being used as lab rats in vaccine trials (45%), and reports that vaccine trials in Africa are unsafe (34%).

### General Vaccine Confidence - Gabon



Perception of safety - vaccines in general compared to a COVID-19 vaccine









Respondents in Gabon are slightly more likely to believe some of these conspiracy theories than the average respondent across the 15-country study. Indeed, more than half of respondents believe that COVID-19 is a planned event by foreign actors (55%).

Likewise, a higher proportion of respondents in Gabon say they have shared these rumors with friends and family (71% vs. 63% overall). This suggests that a considerable proportion respondents are seeing, sharing and believing Covid-19 related conspiracy theories, which could be having an impact on the lower levels of reported willingness to accept a new COVID-19 vaccine.

## 3.5.4 Trusted information sources on COVID-19 vaccine

Social media and other online sources are popular among respondents in Gabon, with half of respondents mentioning these digital platforms (46%). Among those who would refuse the COVID-19 vaccine, TV (74%), online sources (41%) and newspapers (22%) are most frequently mentioned. Thus, these media channels would be most effective for reaching vaccine skeptic people in Gabon Like elsewhere on the continent, the WHO is the most trusted voice for approving a new COVID-19 vaccine (60%). 1 in 5 people (20%) mention Africa CDC. Interestingly, levels of trust in healthcare workers are lower in Gabon than the continental average. For those who would reject a COVID-19 vaccine, the WHO remains the most trusted voice (44%).

Nonetheless, when asked to mention the topmost trusted voice that respondents would want to approve the COVID-19 vaccine, those who would refuse to take the vaccine are more likely to say healthcare workers. This suggests that doctors and nurses could be important in influencing a segment of this vaccine hesitant group.


### 3.6 Kenya

#### Summary

Reported willingness to accept a COVID-19 vaccine is high in Kenya. Among those who are unwilling to take a new vaccine, lack of trust and safety concerns are most frequently cited as reasons for rejecting it.

Willingness to accept varies considerably across the regions of Kenya, with the lowest reported willingness identified in the North Eastern and Coastal regions. Reported willingness to accept a COVID-19 vaccine is also lower among younger respondents.

Given the high level of credibility attributed to the WHO, a collaborative effort between this international body, domestic healthcare workers, and community organizations may serve to disseminate vaccine messaging widely across the country. Using the most popular and trusted media channels, i.e., TV and social media, would also help to reach and engage those who may be more hesitant towards a COVID-19 vaccine.

### 3.6.1. Reported willingness to accept a COVID-19 vaccine

Reported willingness to accept a COVID-19 vaccine in Kenya is high compared to the continental average. Nonetheless, 1-in-7 Kenyans (14%) remain unconvinced about taking a new vaccine. Reported willingness to accept are consistent across genders and education levels.

As in many countries surveyed across the continent, older people are much more likely to accept the COVID-19 vaccine. 1-in-5 Kenyans (20%), aged 18-24, would not take the vaccine, compared to just 1-in-14 (7%) people over 55. Refusal to take the vaccine is also higher among students (22%), in comparison to people who are working (13%).

Reported willingness to accept a COVID-19 vaccine varies considerably across the regions of Kenya, with high reported willingness to accept in Nairobi and the Rift Valley. Willingness to vaccinate is much lower in the Coastal and North Eastern regions. 1 in 4 respondents living in the North Eastern region (24%) say they would refuse to take the vaccine.



North I

## 3.6.2 Overall and COVID-19 specific vaccine confidence

In line with many countries surveyed in this study, Kenyans appear more confident in the importance of vaccines in general, than in their safety and effectiveness. However, unlike much of the continent, confidence in the safety of a COVID-19 vaccine is not largely different from general vaccine confidence. Indeed, Kenya falls into the category of countries surveyed which are more likely to believe that a COVID-19 vaccine would be safe and effective.

Rumors about COVID-19 may have had an impact on the perceived safety of the vaccine. Respondents who believe COVID-19 related conspiracy theories are much more likely to think that the vaccine would be unsafe (29%), compared to those who do not believe the rumors (20%).

Overall, the pandemic appears to have had a generally positive impact on vaccine confidence, with almost 2 in 3 people surveyed in Kenya (64%) now much more likely to vaccinate themselves after the COVID-19 epidemic.

#### 3.6.3 Disinformation

Self-reported exposure to disinformation in Kenya is consistent with the average observed across the 15-country study. 2 in 3 Kenyans (65%) report seeing stories about COVID-19 that they thought were untrue.

However, the proportion of people who have seen some of the common COVID-19 related rumors is above the continental average. This suggests that people in Kenya may not always be able to correctly distinguish between disinformation and factual accounts.

Almost 9 in 10 (88%) have seen articles claiming that coronavirus was created and spread by China. Moreover, over 7 in 10 (71%) report sharing these stories with friends and family.

In Kenya, belief in COVID-19 related rumors is consistent with wider survey data. Almost half of Kenyans (47%) believe that people in Africa are being used as guinea pigs in vaccine trials. Between 30-35% also believe the other Africa-related rumors.

#### **General Vaccine Confidence - Kenya**



Perception of vaccine safety - Vaccines in general compared to a COVID-19 vaccine



COVID-19 Vaccine Confidence – Kenya





People who think vaccines in general are unsafe are more likely to refuse the COVID-19 vaccine (27%) than those who think vaccines are safe (11%). Indeed, safety concerns, as well as lack of trust in the vaccine, are the most common reasons given by people who say they would not take a COVID-19 vaccine. Many express a wish to see the results of the vaccine elsewhere first before agreeing to take it themselves.

### 3.6.4 Trusted information sources on COVID-19 vaccine

In comparison to the rest of the countries surveyed, social media and newspapers are more popular sources of information. TV remains a trusted source of information for many Kenyans (78%). Furthermore, online sources in general are trusted by more than half of respondents, including those who would refuse to take a COVID-19 vaccine.

When it comes to vaccine messaging, TV and online sources appear to be effective communication channels to reach a wide range of the Kenyan citizens.



### 3.7 Malawi

#### Summary

Reported willingness to accept a COVID-19 vaccine is reasonably high in Malawi, though a small but sizeable proportion say they would not take it. Women and people who live in small cities are most likely to refuse a vaccine.

Reported willingness to accept appears to be closely tied to perceptions of safety. Those who think that vaccines in general are unsafe tend to refuse a new vaccine. Moreover, a lack of trust or suspicions around safety were the most common reasons given by those refusing the vaccine.

Radio is one of the most trusted sources of information in Malawi, making it an important communication channel for any vaccine messaging campaign.

## 3.7.1. Reported willingness to accept a COVID-19 vaccine

Reported willingness to accept a COVID-19 vaccine in Malawi is in line with the overall average across Africa, with 4-in-5 saying they would take it. Reported willingness to accept is considerably higher among men, matching the higher levels of vaccine confidence observed in general.

Findings are consistent across age groups and education levels, though younger people are slightly more inclined to take the vaccine, which goes against the continental trend.

Considerable regional variations are found in Malawi, with much higher willingness to accept a COVID-19 vaccine reported in the North (88%) compared to the South (78%). Village-dwellers (86%) also appear more open towards a COVID-19 vaccine, compared to 81% of those living in big cities and 75% of people in smaller ones – a trend observed across the 15-country study.

Among those who believe some of the Covid-19 related rumors, willingness to vaccinate is lower (77% say they would accept such vaccine), in comparison to people who do not believe these conspiracy theories (83%). Safety is evidently a crucial issue for people who would refuse the vaccine, with only 1-in-2 (52%) respondents who think vaccines in general are unsafe saying they are willing to take a COVID-19 vaccine (vs. 83% of those who think vaccines are safe).



Reported willingness to accept a new COVID-19 vaccine









### 3.7.2 Overall and COVID-19 specific vaccine confidence

General vaccine confidence in Malawi is high, and is above the continental average. Interestingly, people are more convinced by the safety and effectiveness of vaccines, but less sure of their importance.

However, when it comes to the COVID-19 vaccine, the reverse is true, with respondents feeling least confident about the safety of it. Indeed, 1 in 5 people Malawi respondents believe that a COVID-19 vaccine would be unsafe.

Higher levels of vaccine confidence are observed among men: 78% of men think a COVID-19 vaccine is safe (vs. 72% of women). Likewise, people in villages are more likely to think the vaccine is safe (82% vs. 73% of those living in big cities).

Across the regions of Malawi, concerns about the safety and effectiveness of a new COVID-19 vaccine are much higher in the Central and Southern regions, when compared to the North. This coincides with lower Reported willingness to accept in the Southern and Central regions.

#### 3.7.3 Disinformation

Survey data reveal low levels of self-reported exposure to disinformation about COVID-19 in Malawi. 1-in-2 (48%) say they had seen little to no rumor stories (vs. 33% overall). However, a higher proportion of Malawi respondents report having seen articles containing Covid-19 related conspiracy theories.

Over 4-in-5 respondents in Malawi had seen news reports that claim coronavirus was created and spread by China. Moreover, 2 in 3 report sharing these stories with friends and family.

Belief in these conspiracy theories corresponds to wider survey findings. Almost half of Malawi respondents (47%) believe that people in Africa are being used as guinea pigs in vaccine trials (vs. 45% overall).

Interestingly, more than 9 in 10 know that it is important to stay home and self isolate if they have COVID-19 symptoms. It appears that this message has spread effectively across the country.

**General Vaccine Confidence - Malawi** 



Perception of vaccine safety - Vaccines in general compared to a COVID-19 vaccine









## 3.7.4 Trusted information sources on COVID-19 vaccine

Radio is very popular in Malawi as a trusted source of information about coronavirus, with 3 in 4 respondents surveyed (77%) mentioning this source, suggesting that this would be a useful means for spreading vaccine messaging. Compared to the overall average, a higher proportion of Malawi respondents trust healthcare bodies (23%. vs. 30% respectively). Social media and other online sources are far less popular than in many other countries surveyed.

Among Malawi respondents, 66% mention the World Health organization as the key trusted body in terms of approval of the safety and efficacy of a COVID-19 vaccine.



### 3.8 Morocco

#### Summary

Compared to other countries surveyed, Moroccans tend to be among the most concerned about safety issues around new COVID-19 vaccines, although confidence in vaccines in general is high.

## **3.8.1. Reported willingness to accept a COVID-19 vaccine**

Reported willingness to accept a COVID-19 vaccine is relatively high, with 7-in-10 respondents expressing willingness to take it, particularly in the north western region of Rabat-Salé-Kenitra (83%). Nonetheless, Morocco fares less well than the overall average (79%), particularly when compared to Tunisia, the other North African country surveyed (92%).

Willingness to take a COVID-19 vaccine is consistent across both genders as well as age groups. Younger respondents, i.e., those below the age of 25, report similar willingness to those aged 55 and over (74% vs. 70% respectively).

Moroccan respondents with a generally vaccine confident attitude (72%) are more open to accepting a COVID-19 vaccine than their hesitant counterparts (63%). Similarly, those who report seeing *little to no* disinformation (79%) seem more open to accepting a COVID-19 vaccine than those reporting *at least some* exposure (67%).

## 3.8.2 Overall and COVID-19 specific vaccine confidence

The predominant majority of Moroccan respondents believe that vaccines in general are important (97%), although considerably lower proportion (78%) believe that vaccines are safe.

As found across most of the 15 countries surveyed, concerns around safety tend to be more prominent when thinking about a COVID-19 specific vaccine. 55% of Moroccan respondents believe a COVID-19 vaccine would be safe (vs. 78% who think general vaccinations are safe).



Reported willingness to accept a new COVID-19 vaccine





#### General vaccine confidence - Morocco



<sup>1</sup> Figures for COVID-19 cases taken from WHO

Interestingly, women are more likely to *strongly* agree that a COVID-19 vaccine would be safe (34% vs. 28% men) in contrast to findings from wider global research which suggest that women tend to be more cautious or skeptical about vaccines.

The general trend across the 15 countries surveyed suggests that COVID-19 has had a great impact on likelihood to accept routine vaccinations. In contrast, in Morocco, almost half (47%) report no change in their attitudes towards vaccinations as a result of COVID-19. Those in the capital (54%) are more likely to say their attitudes remain unchanged (vs. 42% in villages). This may be due to the fact that views towards general vaccinations and a COVID-19 vaccine are already relatively favourable. Furthermore, over 1-in-3 (35%) report greater likelihood to vaccinate as a result of COVID-19 with only 1-in-7 (15%) saying they would not.

#### 3.8.3 Disinformation

3-in-4 respondents (74%) believe that they have seen or heard *at least some* information about the coronavirus outbreak that seemed made up or untrue – higher than the overall average (65%).

Men are more likely to report exposure to disinformation than their counterparts (78% vs. 70% of women). This is in line with wider survey findings which suggest that men tend to trust online sources, especially social media, where disinformation is highly prevalent.

Respondents' propensity to believe rumors around coronavirus varies and depends on the type of rumor. 2in-3 (64%) consider the spread of the virus to be a planned event by foreign actors, higher than the average respondent across the 15 countries (49%). This may be due to the fact that a high percent of Moroccans report seeing stories on China (88%) causing and spreading the virus (vs. 73% overall).

Half of Moroccan respondents (52%) think only people from poor backgrounds or those with little understanding are chosen for vaccine trials in Africa, again higher than the average (42%).

Demographically, men are more likely to *definitely* believe these stories, suggesting higher exposure to and propensity to believe disinformation. They are also more likely to share rumor stories than women, including on social media or in person.

#### **COVID-19 Vaccine Confidence - Morocco**









### 3.8.4 Trusted information sources on COVID-19 vaccine

Morocco differs significantly from other countries surveyed when it comes to its most trusted information sources on COVID-19. Moroccan respondents are more likely to trust national health authorities, than the average respondent across the 15 countries surveyed (45% vs 15% respectively). The same applies to government sources (56% vs. 18% respectively) – a trend that also resonates in Tunisia, the other North African country surveyed. Yet in stark contrast to Tunisia, Moroccans are twice as likely to mention social media among their most trusted sources (40% vs. 20% in Tunisia).

In Morocco, as elsewhere, the data show a clear trend whereby those who are more vaccine skeptic, those who are prone to believing disinformation and those who are vaccine hesitant in general are more likely to rely primarily on social media, suggesting that it will be important to use these platforms to reach those most hesitant to accept a vaccine.

Consistent with overall figures, Moroccans are most

likely to mention the WHO (59%) as the body most trusted to approve the safety and efficacy of a new COVID-19 vaccine. Yet, Morocco differs from other countries surveyed through its higher levels of trust placed in its government to approve the new vaccine (36% vs. 22% in Tunisia and 30% overall).



### 3.9 Niger

#### Summary

Unlike in other countries surveyed, respondents in Niger reported primarily relying on informal sources for information on COVID-19, such as family and friends, using communication channels like WhatsApp to inform themselves and each other. Consequently, international bodies such as the WHO carry less weight in Niger, rather respondents would like approval of the vaccine's safety and efficacy from official domestic sources, such as the government.

## 3.9.1.Reported willingness to accept a COVID-19 vaccine

Reported willingness to accept a COVID-19 vaccine is high, with over 9-in-10 saying they would do so (93%). Only Ethiopia shows higher levels across the region.

While reported willingness to accept COVID-19 vaccination is consistent across both genders and age groups, regional differences are evident. Respondents from villages are more likely to say they would take a COVID-19 vaccine (95% vs. 86% of those from the capital). This correlates to general trends across this 15-country study, whereby people living in bigger cities tend to be more hesitant towards a COVID-19 vaccine.

Views on vaccines in general appear to impact perceptions towards a COVID-19 vaccine. The majority who are generally vaccine confident tend to be more willing to take a new COVID-19 vaccine (compared to 80% of those who are generally vaccine hesitant), with safety playing a particular role in this. Reported willingness to accept a COVID-19 vaccine is more widespread among respondents who think vaccines in general are safe (95%) (vs. those who disagree (72%) (See next section 3.9.2).

## 3.9.2 Overall and COVID-19 specific vaccine confidence

Reported willingness to accept a COVID-19 vaccine is reflected in high levels of vaccine confidence in general - almost 9-in-10 Nigeriens believe vaccines in general are important, safe and effective. Similarly, a majority of respondents (around 4-in-5) believe the same about a COVID-19 vaccine.



Reported willingness to accept a new COVID-19 vaccine



% saying 'yes' to taking a COVID-19 vaccine – Demographics



% saying 'yes' to taking a COVID-19 vaccine – Attitudinal groups



<sup>1</sup> Figures for COVID-19 cases taken from WHO

As in other surveyed countries, safety concerns play a key role in influencing willingness to accept a COVID-19 vaccine, more so than for general vaccinations.

Nonetheless, in comparison to other countries surveyed, Niger is the second most likely country to agree that a COVID-19 vaccine would be safe, suggesting more trust in this novel vaccine compared to the rest of the countries surveyed.

This might be linked to little awareness of disinformation around COVID-19. Nigeriens, for instance, are less likely to think that the virus is man-made (10% vs. 23% overall).

#### 3.9.3 Disinformation

3-in-5 (57%) of Nigerien respondents say they have seen *at least* some disinformation. Again, gender differences prevail, as observed in other Western African countries, including Nigeria. Those who trust social media or believe in conspiracy theories also fall under this category, an unsurprising trend given that disinformation is widespread on social media.

Compared to other countries surveyed, Nigeriens are significantly less likely to believe rumor stories. Between a fifth (20%) and just over a third (36%) of respondents believe the disinformation stories tested in the survey (compared to 40-50% of respondents across the 15country study).

Men are more likely to report exposure to at least some disinformation, which they report being more likely to believe than the Nigerien women surveyed. However, men tend to believe they are well-informed (48% vs. 37% of women). This is in line with overall findings, which suggest that respondents do not accurately distinguish between true and untrue stories, but have high confidence in their own ability to do so.

Further, Nigerien respondents who believe vaccines in general are unsafe also tend to believe disinformation and rumors, further highlighting the link between vaccine skepticism and susceptibility to believing in disinformation.

**General Vaccine Confidence - Niger** 



#### COVID-19 Vaccine Confidence - Niger







### 3.9.4 Trusted information sources on COVID-19 vaccine

Niger is different to most other countries surveyed, in that radio is the most frequently mentioned trusted media source for information on COVID-19 (76% vs. 51% overall). Similar, but slightly lower levels of trust in radio sources are also found in Nigeria, one of the other Western African countries surveyed.

Unlike wider survey findings, in Niger informal sources are more frequently mentioned, including family and friends (46% vs. 15% overall) and WhatsApp (22% vs. 7% overall). Social media is low in the reported list of trusted information sources (13% vs. 29% overall).

Men and younger respondents tend to cite WhatsApp, while women and older respondents are more likely to mention family and friends.

Given the reliance on informal sources, it is perhaps unsurprising that respondents from Niger are less likely than the average respondents across the 15-country study to say they want formal institutions (e.g. WHO) to provide approval of new COVID-19 vaccines (29% vs. 59% overall).

In contrast to wider survey findings, Nigeriens are most likely to trust the host government (56%) to approve the



COVID-19 vaccine.

### 3.10 Nigeria

### 3.10.1. Reported willingness to accept COVID-19 vaccine

Consistent with the average respondent across the 15 countries surveyed (79%), overall reported willingness to accept a COVID-19 vaccine in Nigeria 76%, although this is variable across different settings in the country.

Younger respondents (24 and under) are less keen to receive the vaccine than their older counterparts. This is in line with the overall trend, which indicates that older people are more open to taking a COVID-19 vaccine, if it has been deemed safe and effective.

Those who do not know anyone who has had COVID-19 are less likely to accept a COVID-19 vaccine (76%) compared to those who know someone (88%). Given that the predominant majority of Nigerian respondents say they do not know anyone who has tested positive for the virus, (95% vs. 80% overall), this may explain why 2-in-3 (67%) think the threat from coronavirus is exaggerated.

There was also little testing available at the time the survey was conducted, so awareness about the numbers of people who were ill with COVID-19, versus other illnesses with similar symptoms, likely affected low perceptions of disease risk.

Getting these respondents with no exposure to the virus to understand the risk of the virus and informing them on COVID-19 may be key to help increase willingness to accept the vaccine, particularly within the small, but considerable proportion of those who refuse the vaccine (23%).



1 <sup>st</sup> Confirmed	Total confirmed	Confirmed deaths
COVID-19 case	cases as of 23 Dec	as of 23 Dec
March 18, 2020	79,789	1,231

Reported willingness to accept a new COVID-19 vaccine



% saying 'yes' to taking a COVID-19 vaccine – Demographics



% saying 'yes' to taking a COVID-19 vaccine – Attitudinal groups



<sup>1</sup> Figures for COVID-19 cases taken from WHO

Another important factor is safety, a key concern when it comes to a COVID-19 vaccine across the 15 countries. Those who believe vaccines in general are safe (80%) are twice as likely to accept a COVID-19 vaccine vs. 42% of those who disagree).

## 3.10.2 Overall and COVID-19 specific vaccine confidence

As seen in other countries, high reported willingness to accept a COVID-19 vaccine is in line with wider confidence in general vaccinations. The majority of Nigerians think vaccines are important safe, important and effective (around 9-in-10).

Yet, Nigerians are less likely to believe that a COVID-19 specific vaccine would be safe, when compared to general vaccinations. Again, those who know someone who had COVID-19 tend to have more confidence and believe that a vaccine against the virus would be safe, compared to those who do not know anyone (89% vs. 76% respectively).

#### 3.10.3 Disinformation

2-in-3 (67%) Nigerian respondents believe that they have seen or heard at least some information about the coronavirus outbreak that seem made up or untrue – in line with the overall 15 country average (65%).

Men are more likely to report exposure to misinformation (71% vs. 64% of women). Similarly, young respondents also tend to report higher exposure to disinformation than older ones. This may be related to the fact that young people are more prone likely to be using social media.

Interestingly, those who believe in conspiracy theories are more likely to report exposure to disinformation, suggesting inaccurate evaluation of what is classed as disinformation. This is supported by the fact that those who report seeing disinformation tend to be the ones who believe individual rumor stories on COVID-19.

When asked about specific disinformation stories, 3 in 5 Nigerians (59%) mention believing that the virus is spread by China, with men much more likely to say so. Around 2 in 5 respondents also buy into the Africarelated rumors.

Given that Nigerians are less likely to know anyone who has had a positive COVID-19 test, it is unsurprising that these rumor stories hold more weight among respondents from this country (compared to the overall average).

#### General vaccine confidence - Nigeria



#### **COVID-19 Vaccine Confidence - Nigeria**









### 3.10.4 Trusted information sources on COVID-19 vaccine

Contrary to wider survey data, Nigerians are more likely to trust radio (69% vs. 51% overall) and social media (36% vs. 29% overall). At the same time, they are less willing to trust government sources (8% vs. 18% overall) and healthcare authorities (14% vs. 23% overall).

Understandably, those who live in the capital or cities rely more heavily on online sources, including social media, owing perhaps to better internet connection and signal.

Younger respondents are also more likely to rely primarily on social media than older ones, as observed more widely across the 15 countries surveyed. This suggests the importance of using these platforms for communication and engagement efforts around COVID-19 vaccination, e.g., especially for those under the age of 25, who tend to be less keen on a COVID-19 vaccine and are more likely to be using social media.

The WHO is most frequently mentioned (74%) by Nigerian respondents in terms of being a trusted body to approve the safety and efficacy of a COVID-19 vaccine.

Nigerians living in villages are less likely to mention the WHO (61% vs. 79% in capital or cities); this may be due to the fact that the international body is perceived as a large, foreign institution. Consequently, it would be best to reach those in rural areas and villages through community organizations to reassure them about the COVID-19 vaccine.



### 3.11 Senegal

#### Summary

Compared to other countries surveyed in this study, Senegalese respondents appear more likely to be exposed to and believe in disinformation. This may explain why Senegal has one of the lowest levels of reported willingness to accept a COVID-19 vaccine across the 15-country study, though a majority are still open to accepting a COVID-19 vaccine.

### 3.11.1. Reported willingness to accept a COVID-19 vaccine

Senegal has the second lowest level of reported willingness to accept COVID-19 vaccination across the 15-country study (65%vs. 79% overall).

While reported willingness to accept a COVID-19 vaccine is consistent across both genders, there are regional differences; respondents from Dakar, the capital, and Diourbel express more willingness than those in Thies.

Younger respondents (24 and under) also appear more reluctant to receive the vaccine than their older counterparts. This is in line with the overall trends, which suggest that older respondents place more trust in a COVID-19 vaccine, and perhaps recognize that they are more vulnerable to COVID-19 serious illness.

In Senegal, attitudes rather than awareness and knowledge of COVID-19 play an influential role in determining willingness to accept the vaccine. In line with wider survey data (67%) Senegalese respondents correctly state that COVID-19 is caused by a virus (65%). Nonetheless, they are significantly more likely to view the threat from the virus to be exaggerated (79% vs. 58% overall). The perceived lower risk from the virus may be a contributing factor to lower reported willingness to accept vaccination against COVID-19

Overall vaccine confidence appears to influence willingness to accept a COVID-19 vaccine. Senegalese respondents who are generally vaccine hesitant tend to report unwillingness to accept a COVID-19 vaccine, as do those who have never been vaccinated with other vaccines.



Reported willingness to accept a new COVID-19 vaccine





% saying 'no' to taking a COVID-19 vaccine – Attitudinal groups



<sup>1</sup> Figures for COVID-19 cases taken from WHO

## 3.11.2 Overall and COVID-19 specific vaccine confidence

Reported willingness to accept a COVID-19 vaccine is similar to levels of general vaccine confidence in Senegal. At least 2-in-3 Senegalese respondents believe that vaccines are important, safe or effective.

Safety appears to be a key concern – a trend observed in other countries surveyed – and may be a key driver for lower levels of reported willingness to accept a COVID-19 vaccine. In Thies, where just over half (53%) are willing to take a COVID-19 vaccine, respondents are considerably more likely to believe that vaccines are unsafe than in the other regions of Senegal surveyed. Similar disparities are evident regarding views on vaccine effectiveness.

Contrary to global trends which suggest that women are more skeptical about vaccines, Senegalese women tend to have more confidence in vaccine safety (70% vs. 63% of men) and effectiveness (73% vs. 65% of men).

As observed in the wider study, Senegalese respondents tend to believe that a new COVID-19 vaccine is less safe than vaccinations in general, witnessing the second starkest differences between these two different types of vaccinations. (41% who <u>disagree</u> a COVID-19 vaccine would be safe vs. 29% who <u>disagree</u> vaccines in general are safe).

#### 3.11.3 Disinformation

Senegal observes the highest self-reported exposure to disinformation across the 15-country study. Almost 9-in-10 (88%) respondents reported that they had seen or heard at least some information about the coronavirus outbreak that seemed made up or untrue (vs. 65% overall).

Men are more likely to report *at least some* exposure to disinformation than their respective counterparts in other countries, as do those who believe that the threat from the virus is exaggerated (90% vs. 84% who disagree). As seen in the wider study, those who mainly rely on social media for information on the virus also claim they have seen rumors.

Exposure to specific rumors that depict foreign actors as the perpetrators and the people of Africa as victims is considerably higher in Senegal than in the other study countries. Senegalese respondents tend to believe, more than the average respondents across the 15country study, that the U.S. is the main reason for spreading the virus, that people in Africa are being used

#### General vaccine confidence - Senegal









#### **COVID-19 Vaccine Confidence - Senegal**

as lab rats and that vaccine trials in Africa are unsafe (more than twice as likely for the latter two stories).

## 3.11.4 Trust in information sources on COVID-19 vaccine

Respondents in Senegal are consistent with the overall average when it comes to most trusted media sources. They are most likely to mention national television (65%), followed by radio (52%) and social media (29%).

Male respondents are more likely to trust social media (32% vs. 25% of female counterparts).

WHO is the most frequently mentioned body (41%) in terms of approval of the safety and efficacy of COVID-19 vaccines.



### 3.12 South Africa

#### Summary

Reported willingness to accept a COVID-19 vaccine is high in South Africa, though a significant minority claim they would refuse the vaccine. These tend to be younger respondents, those with primary education, the unemployed, or those who live in villages.

Considerable regional variations are observed across South Africa. Therefore, any vaccine messaging campaigns should target the more vaccine hesitant groups in rural areas of Western Cape, Free State and Mpumalanga.

Newspapers and online sources are more popular in South Africa than in many other African countries surveyed. Social media is particularly trusted by those who say they would refuse a vaccine. Thus, vaccine messaging campaigns on multiple media channels would help reach and engage a wider target audience.

Moreover, community organizations are popular among rural respondents, especially those in Free State. Collaboration with these local groups should form an important part of addressing vaccine hesitancy in South Africa.

### 3.12.1. Reported willingness to accept a COVID-19 vaccine

More than three quarters of South Africans say they would take a new COVID-19 vaccine if it were publicly available. However, this reported willingness to accept a COVID-19 is lower than the overall average.

Reported willingness to accept a COVID-19 vaccine is consistent across genders, though other demographic differences are evident. Older generations, graduates, and those who live in big cities report being more willing to take a new vaccine. The difference in reported willingness, among people who live in villages (69%) compared to big city dwellers(79%) is considerable, suggesting that the focus of any vaccine messaging campaign needs to engage those living in rural locations to take the vaccine. This is reflected in varied levels of willingness to vaccinate against COVID-19 across the regions of South Africa, with high willingness to accept vaccination in Eastern Cape and Northern Cape.

Reported willingness to accept a COIVD-19 vaccine is closely linked to perceived vaccine safety. Those who think vaccines in general are safe, are more willing to take the vaccine (84%), whereas only half of those who think vaccines are unsafe would take a COVID-19 vaccine (51%).



Reported willingness to accept a new COVID-19 vaccine



% saying 'yes' to taking a COVID-19 vaccine – By Gender & Age Group





<sup>1</sup> Figures for COVID-19 cases taken from WHO

Reported willingness to accept a COVID-19 vaccine is considerably higher among those who do not think that the threat of COVID-19 has been exaggerated (82% vs 70% of those who think the threat is exaggerated). Similarly, respondents who do not believe Covid-19 related conspiracy theories are more willing to take the vaccine. As observed in the wider study, those who do not know anyone with a positive COVID-19 test, and those who rely on social media as a trusted source of information are less willing to take a COVID-19 vaccine. These groups should be at the centre of any campaign focusing on vaccine hesitancy.

### 3.12.2 Overall and COVID-19 specific vaccine confidence

As observed across the 15-country study, South African respondents are more likely to agree on the importance of vaccines than on safety and effectiveness.

Interestingly, there is less of an increase in safety concerns when it comes to the COVID-19 vaccine specifically – in contrast to wider survey data across the 15 countries. 1-in-4 South Africans (24%) surveyed think vaccines in general are unsafe, a similar proportion (26%) say the same about a COVID-19 vaccine.

Some demographic differences are evident. Men appear more skeptical about the safety of the vaccine (66%), compared to three quarters (74%) of women who think the COVID-19 vaccine is safe. People who are employed are much more likely to think a new vaccine would be safe (72%) in comparison to students (61%).

#### 3.12.3 Disinformation

Self-reported exposure to disinformation in South Africa reflects the overall average. 3-in-5 South Africans (63%) say they have seen news stories based on rumors. Respondents in villages are more likely to report seeing disinformation (70%) than people in big cities (62%).

Despite this, South Africans appear to have had higher levels of exposure to specific COVID-19 conspiracy theories compared to the average across all countries surveyed. Indeed, 9-in-10 South Africans (89%) mention seeing reports that Coronavirus was created and spread by China. Respondents in South Africa are also more likely to share these stories with friends and family (71%).

#### General Vaccine Confidence – South Africa



Perceptions on safety of vaccines in general compared to a COVID-19 vaccine









Half of those surveyed in South Africa also believe that coronavirus is linked to 5G (49%). Given the link between belief in conspiracy theories and a refusal to take the COVID-19 vaccine, challenging these conspiracy theories could form an important part of tackling vaccine hesitancy in South Africa.

### 3.12.4 Trusted information sources on COVID-19 vaccine

Trust in newspapers with regards to information on the virus is higher in South Africa than elsewhere in the African countries surveyed. 1-in-4 South Africans (24%) rely on newspapers. Online sources are among the most frequently mentioned trusted information sources, with almost half of those surveyed consulting online platforms to get their news about COVID-19 (49%).

Crucially, 3-in-10 people (31%) who would refuse to take the COVID-19 vaccine trust social media as a source of information. Social media is a key platform to help reach and engage this vaccine hesitant group with positive vaccine messaging. It could also be used to target rural inhabitants, with more than a third (35%) of people living in villages relying on social media as a trusted source, compared to just 1-in-5 (20%) of those in big cities.

WHO was identified by respondents as the trusted body

to approve the safety and efficacy of a new COVID-19 vaccine.

Trust in community organizations is higher than the continental average, especially in Free State (33%). This region has a low reported willingness to accept the COVID-19 vaccine so collaboration with community organizations would be key.



### 3.13 Sudan

#### Summary

The COVID-19 pandemic seems to have had a significant impact on views towards vaccination in Sudan. Although the country scores relatively low in terms of general vaccine confidence, large majorities appreciate the importance of a safe and effective COVID-19 vaccine. Reported willingness to accept a COVID-19 vaccine is above average with nearly 9-in-10 saying they would get the vaccine themselves. Sudanese respondents are also among those most likely to say the pandemic has made them more likely to vaccinate in the future, suggesting a potential ongoing impact that could improve willingness to accept vaccines against other diseases.

When it comes to trusted sources of information on the virus, respondents in Sudan are less likely than those elsewhere to trust their national broadcasters, instead favoring international / satellite television. As elsewhere, the WHO is also the body respondents trusted for 'approval' of any new coronavirus vaccine.

#### 3.13.1 Experience and perceptions of COVID-19

Compared to some other countries included in this study, respondents in Sudan are more likely to personally know someone who has tested positive for the disease (29%, compared to 19% overall), although few have had any cases in their own household (4%). However, despite this greater prevalence of positive tests among their acquaintance, nearly 3 in 4 respondents in Sudan feel that the threat posed by the virus is exaggerated (73%), suggesting little experience of more extreme cases.

## 3.13.2 Reported willingness to accept a COVID-19 vaccine

Reported willingness to accept a COVID-19 vaccine in Sudan is high, with almost 9-in-10 (86%) saying they would get a new vaccine once it had been deemed safe and effective. While there is no significant difference between genders or age groups at this measure, those who have children under 18 living in their household are significantly more likely to accept the vaccine than those without. There is also a difference between those in cities (who are more likely to accept the vaccine) and those in rural areas (who are more likely to reject it), as has been observed in some other countries.

People who are generally confident in the safety of vaccines and those who have previously been vaccinated against other diseases are significantly more



Reported willingness to accept a new COVID-19 vaccine







<sup>1</sup> Figures for COVID-19 cases taken from WHO

likely to accept a COVID-19 vaccine, as are those who reject conspiracy theories. Unlike in some other countries, however, reported willingness to accept a COVID-19 vaccine is higher among those who feel the threat of the virus is exaggerated than among those who do not (89% vs. 80%), possibly suggesting that these respondents are confident a vaccine will negate the dangers of the virus.

## 3.13.3 Overall and COVID-19 specific vaccine confidence

Overall, vaccine confidence in Sudan is slightly below average for the continent. The country ranks eleventh out of fifteen countries in terms of belief in vaccine safety and tenth for efficacy, but it should be borne in mind that majorities still have faith in both (72% and 75% respectively). 8-in-10 agree that vaccines are important for people of all ages to have and more than 9-in-10 have received vaccines at some point in their lives.

When it comes to the prospect of a new vaccine to protect against COVID-19, the Sudan data show the same pattern as elsewhere, namely that fewer people think a new vaccine would be safe (69%) compared to thinking vaccines in general are safe (72%), but the difference is not as marked as it is in other countries, or at the overall level (a difference of just 3 percentage points compared to 10). This suggests that some of the concerns relating to the 'newness' of the vaccine that are undermining confidence in some areas are not as widespread in Sudan.

At the overall level, more than 8-in-10 respondents in Sudan agree that a new COVID-19 vaccine would be important, with particularly high scores recorded among those with higher levels of education (85% of those with a degree, compared to 74% of those with primary education or below) and those with children in their household (87%, compared to 78% among those without). However, there is a striking difference of opinion between those who would accept the vaccine for themselves (89% of whom agree it would be important) and those who would refuse it (44%).

COVID vaccine rejecters here tend to believe such a vaccine would not be safe (only 33% agree) or effective (39%). The data suggest that this group of COVID-19 vaccine rejecters in Sudan, while only a relatively small minority, reject the vaccine on multiple grounds and are unlikely to be easily shifted in their views.

The pandemic may also have a positive ongoing influence on vaccine confidence and Reported willingness to accept in Sudan; 7-in-10 Sudanese respondents say the pandemic has made them more likely to vaccinate (69%, considerably above the

General Vaccine Confidence - Sudan



Perceptions on safety of vaccines in general compared to a COVID-19 vaccine









continental figure of 49%) and more than half said they were now 'much more likely' to do so, putting the country second only to Ethiopia (53% to Ethiopia's 56%). Only 1-in-10 respondents in Sudan (11%) say they are now less likely to vaccinate, the second lowest figure recorded in this study.

#### 3.13.4 Disinformation

More than 8-in-10 respondents in Sudan report seeing at least some news and information relating to COVID-19, based on rumors rather than facts (85%), placing the country second only to Senegal in terms of the percentage of people reporting exposure to misinformation. This figure is significantly higher among those who say they would accept a COVID-19 vaccine. Around 6-in-10 (58%) report seeing stories attempting to counter disinformation (above the 15-country average of 47%). Most seem to have seen these counter-stories on social media.

Respondents in Sudan are significantly more likely than average to report seeing stories suggesting COVID-19 was created and spread by the USA (49% have seen it in Sudan, compared to 35% of the sample overall).

When it comes to actually believing in specific

conspiracy theories, Sudan is around average compared to other countries, with the exception of the rumor that the spread of disease is related to 5G; while 1-in-4 believe this in the survey as a whole (25%), this rises to 2-in-5 in Sudan (38%). Those who express belief in conspiracy theories such as this are more likely to reject the idea of receiving a COVID-19 vaccine.

## 3.13.5 Trusted information sources on COVID-19 vaccines

The data suggest slightly different usage of television in Sudan as the country scores below average for trust in national television (only mentioned by 3-in-10, only Niger and Malawi are lower) but highest for satellite / international channels (44%) which are the most frequently mentioned source of information on coronavirus. Social media is also widely used with 4 in 10 including it in their top 3 most trusted sources (39%), placing Sudan second out of all 15 countries surveyed.

3-in-4 Sudanese respondents (75%) say that WHO approval of a new COVID-19 vaccine is required for them to trust a new COVID-19 vaccine.



### 3.14 Tunisia

#### Summary

Compared to other countries surveyed in this study, the data for Tunisia suggest the population accepts the public health messages around the danger of the virus and have altered their behavior to help prevent the spread of coronavirus. Only 19% suggest that the threat posed by COVID-19 is being exaggerated and the majority of respondents stated willingness to receive a COVID-19 vaccine.

These views likely reflect the fact that many in Tunisia report personally knowing someone who has tested positive for coronavirus (40%, compared with an average of 12-20% in most other countries).

#### 3.14.1. Reported willingness to accept a COVID-19

Reported willingness to accept a COVID-19 vaccine in Tunisia is high, with over 9-in-10 respondents (92%) saying they are willing to take it. This is notably higher than in Morocco, the other Northern African country surveyed, where only 7-in-10 say they would consider getting a COVID-19 vaccine.

While reported willingness to accept a COVID-19 vaccine is consistent across both genders, there are some evident regional differences; respondents from Grand Tunis express less willingness than the other regions within the country to receive a vaccine. This correlates with a general trend across this 15-country study, whereby people living in bigger cities tend to be more hesitant towards a COVID-19 vaccine.

Younger respondents (35 and under) also appear less willing to accept the vaccine than their older counterparts. Again, this is in line with the overall trend, which indicates that older people are more open to taking a COVID-19 vaccine that has been deemed safe and effective.

Attitudes towards COVID-19, general vaccine confidence, and susceptibility to believing disinformation also play a role in determining willingness to accept the vaccine. Respondents who do not doubt the threat of coronavirus or who reject conspiracy theories show more willingness to take a COVID-19 vaccine.

### 3.14.2 Overall and COVID-19 specific vaccine confidence

Reported willingness to accept a COVID-19 vaccine reflects the overall high levels of vaccine confidence in Tunisia, where more than 9-in-10 agree that vaccines in general are important for everyone (94%) and particularly children (96%). However, despite this acceptance of the importance of vaccines, there are



Reported willingness to accept a new COVID-19 vaccine











#### 3. Results by Country | 3.14 Tunisia

lower levels of confidence in general vaccines' efficacy (86%) or safety (79%).

Unlike in some other countries surveyed where a new COVID-19 vaccine is viewed by some as less safe than vaccination in general, results in Tunisia are comparable (73% believe that a new COVID-19 vaccine would be safe while 79% say the same about vaccines in general). This suggests that Tunisians surveyed may not share the same level of concerns around the novelty of this particular vaccine and the resulting safety risks, as seen in the other African countries surveyed.

In the wider study, the data suggest that people who do not know anyone who has had COVID-19 are less likely to consider accepting a COVID-19 vaccine to be safe, important, or effective, but in Tunisia this trend is inverted. Here, those with no COVID-19 cases in their circle of acquaintance are significantly <u>more</u> likely to agree that a COVID-19 vaccine is important, safe or effective than those who have had family members or other acquaintances who were confirmed as COVID-19 positive.

Tunisian respondents (58%) claim that the global pandemic has made them more likely to vaccinate in general. Those in Grand Tunis (67%) are more likely to report this impact than respondents from central or southern parts of Tunisia (53% for both). Respondents from the capital were less inclined to take a COVID-19 vaccine.

#### 3.14.3 Disinformation

Half of respondents in Tunisia (52%) believe that they have seen or heard at least some information about the coronavirus outbreak that seemed made up or untrue – lower than the overall average (66%). Older respondents, i.e., those over the age of 55 years, are less likely to report at least some exposure to disinformation compared to their younger counterparts (particularly those aged 18 to 24).

However, the data also suggest that Tunisian respondents are particularly susceptible to rumors circulating about the virus; three quarters of respondents appear to think that COVID-19 is a planned event by foreign actors (74%), while 2-in-5 believe that vaccine trials have killed children in Africa (41%) and that discriminatory policy is adopted in choosing people for vaccine trials in Africa, i.e., only the poor and less educated (56%).

Vaccines in General - Tunisia



Perceptions on safety of overall





**COVID-19 Vaccine Confidence - Tunisia** 



Tunisians who are vaccine sceptic, those who trust social media as one of their top three sources, and respondents who believe in conspiracy theories are more inclined to report having seen at least some reporting on the virus that they believed to be untrue. This may reflect their rejection of 'mainstream' media sources and narratives.

## 3.14.4 Trusted information sources on COVID-19 vaccine

Tunisia differs significantly from other countries surveyed in terms of its most trusted media sources. Tunisian respondents are more likely to trust national health authorities than the average respondent across the 12 countries surveyed (35% vs 15%) and are also more likely than average to mention family and friends (22% vs. 16%). Conversely, Tunisian respondents are generally less likely to trust social media (20% vs. 30% overall).

However, in Tunisia as elsewhere, the data show a clear trend whereby those who are more vaccine sceptic or prone to believing disinformation are more likely to rely primarily on online sources or social media, suggesting that it will be important to use these platforms to reach those who are the most vaccine hesitant.

As mentioned above, younger respondents are more likely than older people to express hesitancy towards a COVID-19 vaccine and they are also the greatest users of online media platforms. However, 18 to 24-year olds in Tunisia also show more confidence in international health organizations, such as WHO.

Across the wider survey, the WHO was most frequently mentioned as the trusted body to approve the safety and efficacy of new COVID-19 vaccines. Tunisian respondents were even more likely to report this perception (75% vs. 58% respectively). Both Gavi, the global Vaccine Alliance (51%) and Africa CDC (34%) also have more credibility among Tunisian respondents than across the 15 countries surveyed.



### 3.15 Uganda

#### Summary

Uganda falls within the top 4 countries in terms of reported willingness to accept a COVID-19 vaccine.

Among the small minority who say they would refuse the vaccine (13%), there is no significant difference by gender. However, as observed in many other countries, younger respondents are less likely to express willingness to take the vaccine.

The most common reasons for refusing the COVID-19 vaccine are a lack of trust and concerns about safety. Given the generally high levels of vaccine confidence across Uganda, a campaign highlighting the safety and effectiveness of COVID-19 vaccines may help to persuade those who are unsure.

Radio is a very popular trusted source of information about the pandemic, making it a useful media form for a vaccine messaging campaign.

### 3.15.1. Reported willingness to accept a COVID-19 vaccine

Ugandans report relatively high levels of willingness to take a new COVID-19 vaccine. Almost 9-in-10 (87%) say they would take the vaccine. This level of reported willingness to accept corresponds to higher COVID-19 vaccine confidence across the East African countries surveyed. Reported willingness to accept a COVID-19 vaccine in Uganda is not as high as in Ethiopia, but is higher than in Kenya.

We found no significant difference in willingness to vaccinate between men and women. Like many other countries in the survey, older generations are more likely to take a COVID-19 vaccine. Indeed, more than 9-in-10 of those aged 55 or over (92%) say they would accept the vaccine, compared to 8-in-10 (82%) 18 to 24 year-olds.

Reported willingness to accept is above 84% across all regions of Uganda, with no significant regional variations. Interestingly, those who live in villages are more willing to take the new vaccine, in comparison to respondents who live in cities. This fits with the wider trend noted in many other African countries surveyed.

Furthermore, respondents who think that both the COVID-19 vaccine and general vaccinations are safe, are much more willing to take the new vaccine. Among those who say they would refuse to take it, the most common reasons given are a lack of trust and safety concerns.



Research conducted



Within this group who would reject the vaccine, there also appears to be a lack of understanding about how vaccines work. Many said they want to see people who have been ill with COVID-19 being healed by the vaccine before they would accept it. Evidently, more information is needed to help clarify that the new COVID-19 vaccines are intended to prevent, rather than treat, COVID-19 illness as well as broader awareness raising about how vaccines work.

Our results also show that those who believe conspiracy theories are more likely to reject a COVID-19 vaccine (17%) compared to those who do not believe these rumors (9%). This suggests disinformation circulating about COVID-19 has caused concerns among some Ugandans. Several of those who say they would reject the vaccine cited rumors about the virus as a reason for their refusal.

## 3.15.2 Overall and COVID-19 specific vaccine confidence

Overall vaccine confidence in Uganda is high with 86% agreeing that vaccines in general are important. Like many other countries surveyed, Ugandans are less confident in the effectiveness and safety of vaccines than they are about the importance of vaccines.

There is little difference in views on general vaccine safety across age, gender and education levels. However, those living in big cities are less likely to think vaccines in general are safe (70%) compared to respondents living in small cities (84%) and villages (83%).

In comparison to other countries in the survey, there is less of a drop in confidence in the COVID-19 vaccine compared to general vaccine confidence. While more than 8-in-10 Ugandans (82%) agree that vaccines in general are safe, 3-in-4 (77%) agree that a COVID-19 vaccine would be safe.

Looking across the different regions of Uganda, nearly 9in-10 respondents in the Western region (87%) believe that a COVID- 19 vaccine would be safe, whereas in the Central region 2-in-3 (65%) agree.

Over 2- in-3 (68%) respondents say they are now more likely to vaccinate as a result of the COVID-19 pandemic. This is considerably higher than the 15country average (49%) in terms of reported impact of COVD-19 on overall vaccine confidence.

#### General vaccine confidence - Uganda



Perception of vaccine safety - Vaccines in general compared to a COVID-19 vaccine





**COVID-19 Vaccine Confidence - Uganda** 





#### 3.15.3 Disinformation

Our survey asked respondents how much information they had seen about COVID-19 that they felt was based on rumors and false stories. In Uganda, these levels of self-reported disinformation are lower than the average across all African countries surveyed. 3-in-5 (57%) of Ugandan respondents say they have seen at least some disinformation about Coronavirus, compared to the 15country average of 64%.

Many Ugandans report having seen stories based on common COVID-19 rumors. Nearly 9-in-10 (87%) say they have seen or heard news that the virus was created and spread by China. 3-in- 5 Ugandans surveyed (61%) report sharing these rumors with friends and family.

Meanwhile, the proportion of respondents who believe that these rumors are true is consistent with the average for all 15 countries. For example, 1-in-2 Ugandans in our survey (51%) say they believe the COVID-19 is a planned event by foreign actors.

### 3.15.4 Trusted information sources on COVID-19 vaccine

The most popular form of media in Uganda for receiving information about the pandemic is radio, with 3-in-4 (76%) citing radio as a trusted source. In comparison to other African countries, use of social media and other online sources is lower in Uganda. Only 1-in-4 (25%) trust online sources, while 16% of Ugandans surveyed use social media as a trusted source of information.

The WHO is named as the trusted body to approve the safety and efficacy on a new COVID-19 vaccine -64% of respondents reported trusting the WHO for this role.





# Appendices

4	
4.1	Appendix 1: Methodology Statement
4.2	Sample breakdown
4.3	Survey Questionnaires



### 4.1 Appendix 1 – Methodological statement

Table 4.1.1 outlines the details of the study in each of the 15 countries included. F2F refers to face-to-face interviewing, while CATI refers to telephone interviewing.

Table 4.1.1: Fieldwork details by country

Country	Sample size	Methodology	Languages	FW Dates
Burkina Faso	1,037	F2F	French [Oral translations in Dioula, Fulfulde, Moore]	08/10/2020 - 05/11/2020
Cote d'Ivoire	1,039	F2F	French	27/09/2020 - 18/11/2020
DR Congo	1,007	F2F	French	23/09/2020 - 15/10/2020
Ethiopia	1,001	CATI	Afan Oromo, Amharic, Tigriana	21/09/2020 – 01/10/2020
Gabon	1,112	F2F	French	26/09/2020 – 18/12/2020
Kenya	1,000	CATI	Kiswahili	08/10/2020 - 24/10/2020
Malawi	1,009	F2F	Chichewa	26/10/2020 - 08/12/2020
Morocco	1,000	CATI	Arabic, French	23/09/2020 - 02/11/2020
Niger	1,173	F2F	French [Oral translations in Fulani, Kanuri, Tamasheq, Zarma]	15/09/2020 – 26/09/2020
Nigeria	1,172	F2F	English, Hausa, Igbo, Pidgin, Yoruba	21/09/2020 - 08/10/2020
Senegal	1,010	F2F	French, Wollof	25/10/2020 – 22/11/2020
South Africa	1,056	F2F	English	17/09/2020 – 16/10/2020
Sudan	1,075	F2F	Arabic	21/09/2020 - 12/11/2020
Tunisia	1,000	CATI	Arabic, French	18/09/2020 - 02/11/2020
Uganda	1,008	F2F	Achioli, Luganda, Lumabasa, Lunyankore	23/11/2020 - 24/12/2020

#### 4.1.1 Sample and sampling approach

In all countries, the sample was composed of adults (over the age of 18) resident in survey countries and speaking at least one of the survey languages. In each case, efforts were made to ensure the final sample was representative of the wider population, but these varied depending on the methodology used.

In CATI countries, the sample was drawn from existing telephone databases of respondents who have registered to take part in opinion surveys, and quotas were set to ensure an appropriate distribution in terms of gender, age, and region. While telephone research is well established in Morocco and Tunisia, it is less common in Kenya and Ethiopia where ORB would typically employ a face-to-face methodology. The decision to use a CATI approach in these countries was taken to ensure fieldwork could take place alongside all other countries despite COVID-19 restrictions in force at the time.

In countries where a F2F methodology was used, the first stage of sampling was to allocate interviews to regions/states in accordance with the distribution of the population according to the latest estimates (e.g. if 50% of the population live in one region, 50% of the interviews would be assigned to this region). Once the number of interviews to be conducted in each region had been agreed, an appropriate number of Primary Sampling Units (PSUs, specific areas in which interviews are to be conducted) were randomly selected from the best available database and interviewing teams were then dispatched to the required areas to conduct the interviews. In certain countries (e.g. Gabon, Cote d'Ivoire) public unrest and severe weather conditions meant that some PSUs proved to be inaccessible to interviewers and were replaced with alternatives as close in location and demography as possible.

In general, this random selection approach ensured a broadly representative fall-out in terms of age and gender. In instances where the final sample differed notably from the available national data, data have been weighted back to this average (e.g. over-sampling of men in Cote d'Ivoire was corrected by weighting them down to their appropriate proportion in the final dataset).

#### 4.1.2 Household and Respondent Selection

Once interviewing teams (typically composed of four interviewers and a supervisor) arrived in the required PSU, a starting point was selected (a local focal point such as a mosque or market) and each interviewer dispatched in a different direction. Using a randomizing 'skip pattern' derived from the day's date, interviewers selected households and attempted to make contact with residents.

Once contact was made, household representatives were asked to provide the initials of either all men or all women resident in that household over the age of 18. A respondent within the household was then selected at random using a Kish Grid approach (or, in the case of Sudan, a lottery system). Once a particular respondent had been selected at random, interviewers sought to either conduct the interview with that named person then, or to arrange an appointment for a call-back. If at any stage the household representative or the chosen respondent withdrew their consent to the interview, the interview was terminated immediately.

#### 4.1.3 Languages and translation

The original survey in English was scripted centrally by ORB International. Translations were then prepared by local fieldwork partners and verified by an external agency before being overlaid onto the script. Openended responses to questions were captured verbatim and then coded after the completion of fieldwork by local teams before being checked by ORB staff. In countries such as Burkina Faso and Niger, the main survey was administered in French but oral translations of specific terms in local languages were agreed in interviewer training to ensure accessibility to all respondents.

#### 4.1.4 Quality Control Procedures

Prior to the commencement of fieldwork, all interviewers were trained on the questionnaire and scripts for both CATI and F2F surveys were thoroughly checked to ensure all appropriate logic checks were in place. In CATI countries, interviewers had their first calls overseen by a supervisor to ensure proper technique was observed in all interviews. Interview length was also monitored to ensure interviewers were not 'speeding', and that the agreed acceptable minimum length was observed for both the interview as a whole and set sections within the survey. Between 10 and 15% of calls per country were back-checked to ensure validity of data.

All face-to-face interviews were monitored throughout fieldwork using ORB's suite of quality control measures. These include daily checks of all new interviews for a range of measures including overall interview duration, duration of set sections within the survey, GPS checks of interview location (to ensure sample accuracy), review of recordings of interviewers to ensure correct methodology was employed, etc. Upon the completion of fieldwork in each country, the data were 'cleaned' to ensure a full and reliable final data set, complete with coding for all open-ended responses.

#### 4.1.5 Margin of error

For each figure reported in this survey, it is important to note that the results are based on a small sample of the population (i.e. 1,000 per country) rather than the whole population. Statistically speaking this means that the results are subject to a margin of error that is proportional to the sample size (the larger the sample, the smaller the margin of error). Statistical margin of error is usually reported at the 95% confidence level. This means that we can be confident that if we repeated the survey 20 times, we would expect to get a result within the margin of error on 19 occasions. The overall sample size of 15,000 for this study gives a margin of error of 0.8% at the 95% confidence level, so on 19 occasions out of 20 we would expect to see results that are within 1% above or below those reported in this survey. For individual countries, with a sample size of 1,000, the margin of error will be larger (3.1% at the 95% confidence interval).

#### 4.1.6 Sub-group base sizes

The table below shows the base sizes of the relevant sub-groups charted throughout this report. In all cases except gender, the weighted and unweighted base sizes are the same.

Country	Gender	Age	Education	Settlement size	Threat from COVID-19 exaggerated	Vaccines are safe
Burkina Faso=1,037, Cote d'Ivoire=1,039, DR Congo=1,007, Ethiopia=1,001, Gabon=1,112 Kenya=1,000, Malawi=1,009, Morocco=1,000, Niger=1,173, Nigeria=1,172, Senegal=1,010, South Africa=1,056, Sudan=1,075, Tunisia=1,000, Uganda=1,008	M = 8002, F = 7697	18-24=3776, 25-34=5145, 35-44=3340, 45-54=1913, 55+ =1525	Primary or below= 4711, Secondary/ vocational= 6189, University + =4276	Capital/Big city= 7090, Small city= 3458, Village= 5132	Agree=9130, Disagree= 6046	Agree=12273, Disagree= 2807
Uptake of COVID-19 vaccine	Seen COVID- related disinformation	Tested positive for COVID-19	Trust social media for information	Vaccine confidence	Have received vaccines	Belief in conspiracy theories
Yes=12449, No=2821	At least some= 10118, Not much or none at all= 5172	Personally= 110, Family member= 672, NET: Any acquaintance =2886, Don't know anyone= 12545	Yes=5186, No=10513	Confident= 9879, Hesitant= 5035	Yes=13305, No=2102	Yes=6856, No=8843

#### Table 4.1.2: Sub-group base sizes (Unweighted)

#### 4.1.7 Reporting conventions

Where appropriate, response codes have been grouped together, i.e., strongly agree and tend to agree, which are referred to in certain charts as NET Agree.

DK refers to those who responded with 'Don't Know' and REF refers to those who have 'refused' or chosen not to answer a certain question.

If a large proportion agrees with these statements, these respondents are seen as more vaccine confident; where the opposite holds true respondents are considered to be relatively more vaccine skeptic or hesitant.

To make the report more user-friendly, we have not included base sizes on each individual chart, these can instead be found in Table 4.1.2 in section 4 of this report.

Where figures are negligible, percentages have also been left off the charts to ensure clearer visualization.

The large sample size for this study enables analysis of quite specific subgroups and, wherever differences between groups have been highlighted, these are statistically significant.

Where percentages in charts do not add up to 100 per cent, this is due to the fact that respondents were able to provide multiple response options to a question.

