

CHOLERA

Rapid Response Project



About FMF

Field Medical Foundation (FMF) was founded in 2011 in Aden governorate by a group of doctors and volunteers as an emergency and humanitarian response to the humanitarian situation due to the conflict.

The aim was to focus on delivering emergency aid quickly, effectively and impartially. FMF known as Field Medical Foundation, which was created in the belief that all people should have access to aids regardless of gender, religion or political affiliation.

In 2012, FMF was established as an independent entity, with official declaration by the Ministry of Social Affairs and Labor, and with a vision to be a pioneer model in health and social comprehensive development.

Our vision

We seek to be a leading model in the overall health and social development

Our Mission

Contribute to the provision of integrated health services to help raise the level of health and community development through response and preventive, therapeutic and nutritional interventions, and capacity building through the optimal use of available resources in collaboration with local and international partners.

Our values

Creditability
Loyalty
Commitment
Teamwork
Transparency
Partnership
Excellence



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Field Medical Foundation

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QR Code



INTRODUCTION:

An overview about acute watery diarrhea (AWD) / Cholera:

Cholera is an acute diarrheal infection caused by ingestion of food or water contaminated with the bacterium *Vibrio cholera*.

Every year, there are an estimated 3-5 million cholera cases and 100,000 to 120,000 deaths due to cholera.

The short incubation period of 2 hours to 5 days, enhances the potentially explosive pattern of outbreaks.

Cholera may cause severe dehydration in only a few hours. In untreated patients with severe dehydration, the case fatality rate (CFR) may exceed 50%. If patients are present at the health facility and correct treatment is received, the CFR is usually less than 1%.

At least 90% of the cases are mild, and they remain undiagnosed.

In certain areas, it occurs throughout the year; In our region higher incidence from April to November.

CHOLERA IN EMRO

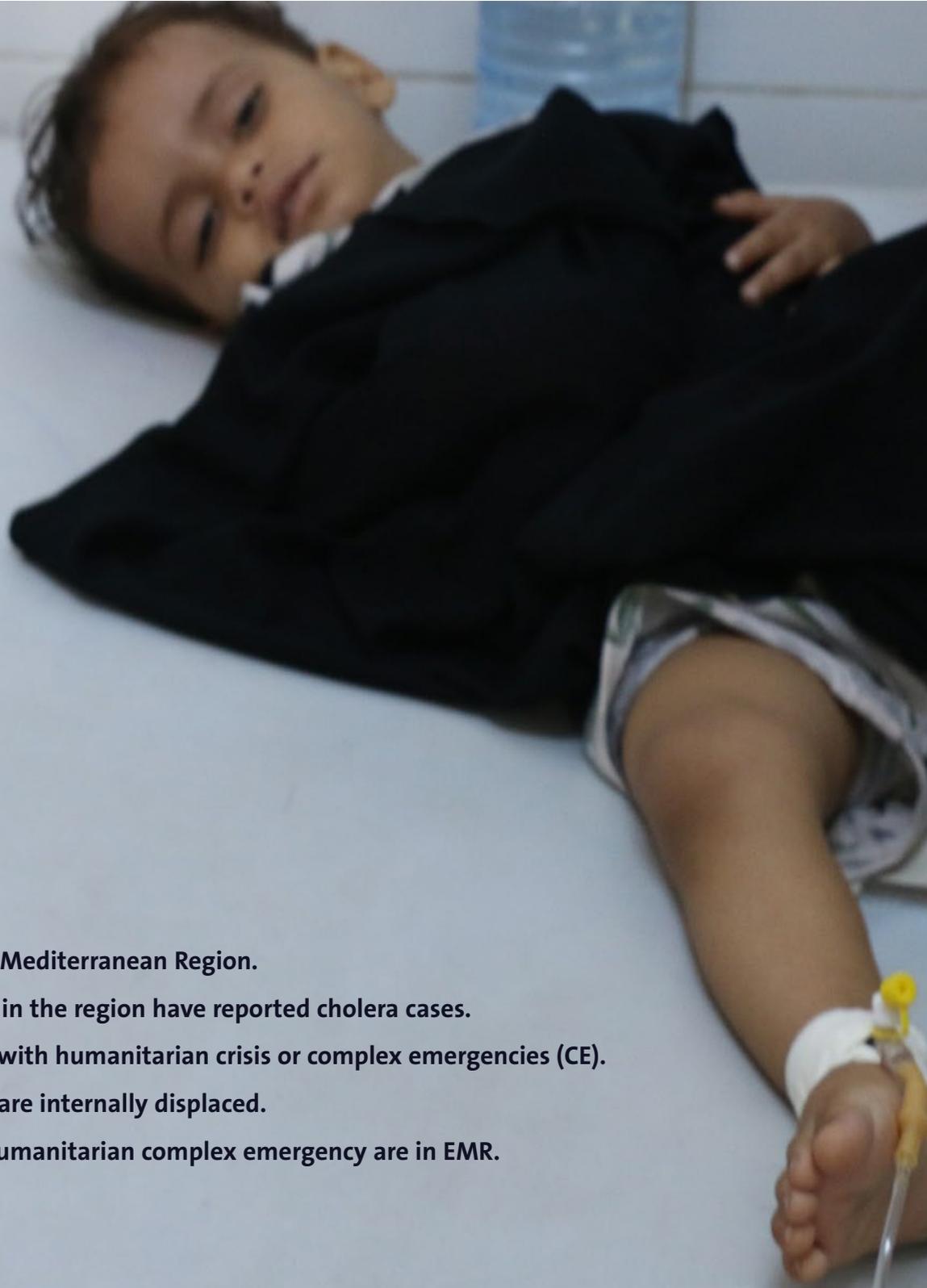
Cholera remains a major public health risk in the Eastern Mediterranean Region.

During the last decade, at least 13 out of the 22 countries in the region have reported cholera cases.

Approximately 76 million people in EMR live in countries with humanitarian crisis or complex emergencies (CE).

Over 10 million of the people living in countries with CEs are internally displaced.

The eight most challenging countries in the world with humanitarian complex emergency are in EMR.





CHOLERA IN YEMEN

In October 2016, an outbreak of cholera began in Yemen and is ongoing as of 31 December 2017. In February and March 2017, the outbreak was in decline, however the number of cholera cases resurged after 27 April 2017.

10 October 2016 – The Ministry of Public Health and Population in Yemen has announced the occurrence of cholera cases in the capital city of Sana'a, Yemen.

a total of 15 cases of cholera have been laboratory-confirmed, of which 11 are from Sana'a, and 4 from Al Bayda.

22 December 2016 - a total of 165 14 cases and 497 deaths (case-fatality rate %3,51) have been reported. Of these 6752 (%47,7) affected females, and 8184 (57.8%) affected children below 5 years of age.

تلميح

FMMFC

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برعايته



مكتب الصحة العامة والسكان
م/عدن



يونيسف

منظمة الطفولة

مشروع الإستجابة العاجلة لوباء الكوليرا

مستشفى ٢٢ مايو

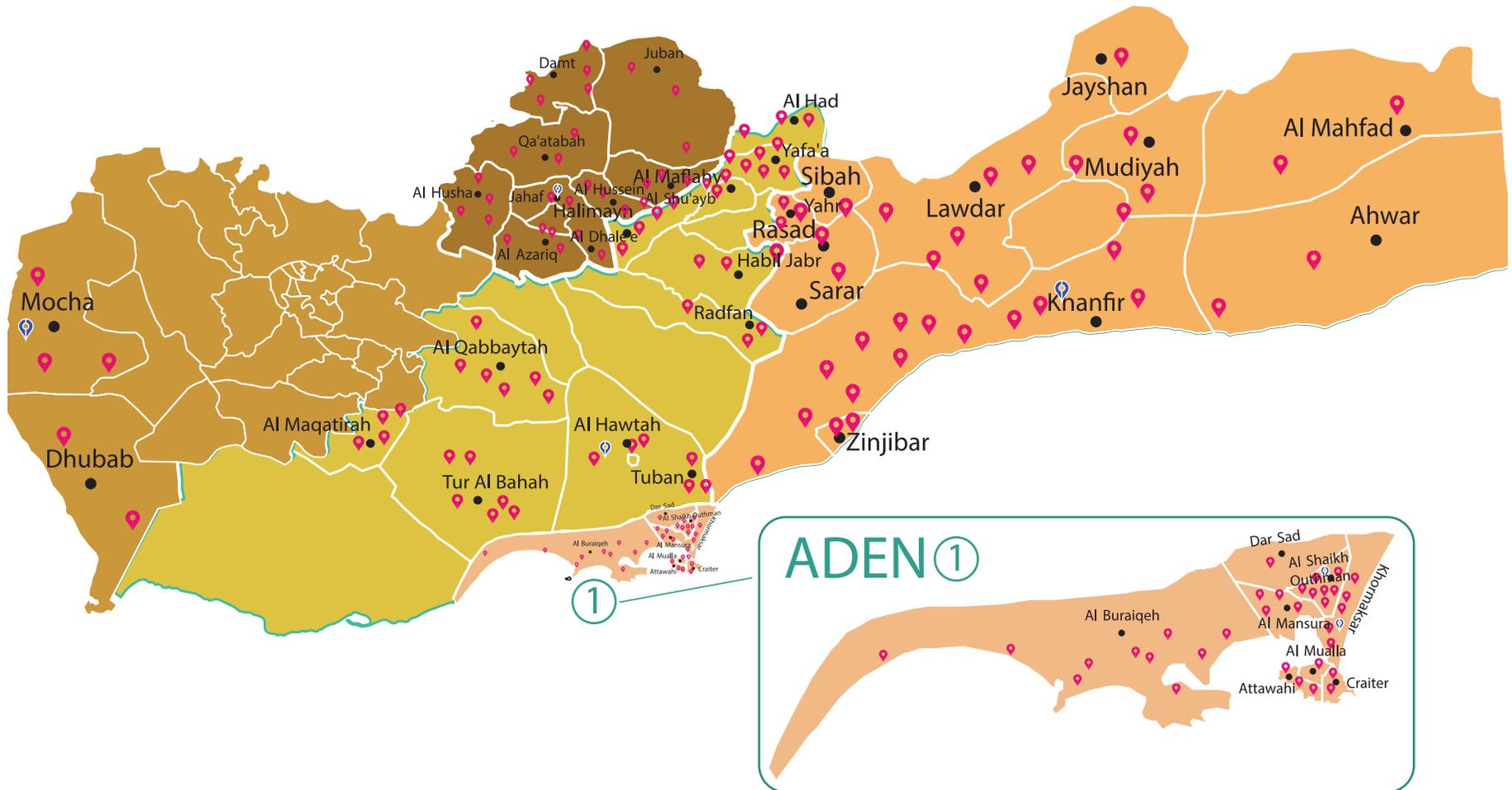
مديرية المنصورة م/عدن

زوايا الأرواء

ORC



CHOLERA RAPID RESPONSE PROJECT



- With increasing numbers of people in some districts of the southern governorates of Yemen affected by acute watery diarrhoea and cholera, Field Medical Foundation (FMF) is working with UNICEF, to save lives in areas where outbreaks are active, and reduce the risk of these diseases crossing into unaffected areas .
- The project started on 6 June 2017, in 4 governorates (Aden, Lahj, Al Dhale`a , Abyan and Al Mokha & Thobab from Taiz governorate). Mainly in 41 districts and 147 Health Facilities .



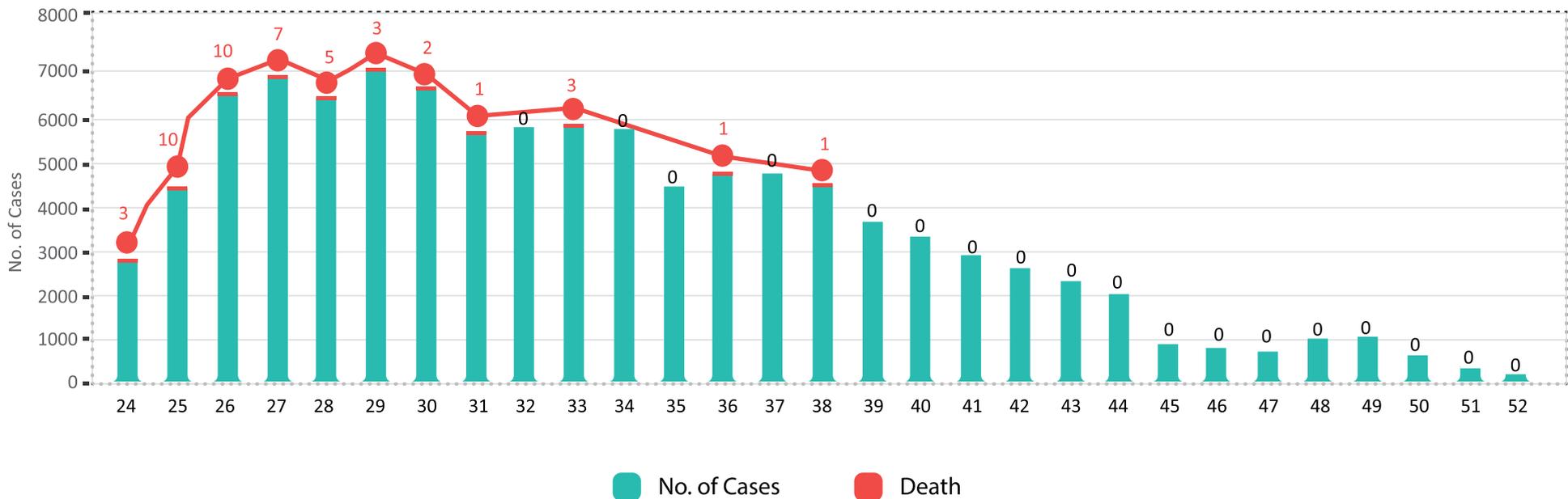
Cholera rapid response project Objectives:

- To reduce the number of cholera cases in affected communities to zero.
- To prevent spread of cholera to high-risk districts.
- To reduce AWD case fatality rate to below %1.

Epi. curve of AWD Cases in targeted governorates

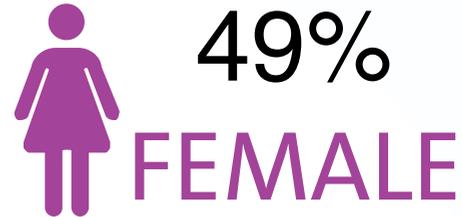
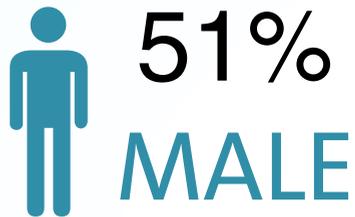
14 June - 31 December 2017

The trend of the AWD cases showed that: the peak of the cases started in the middle of June 2017 (Epi. Week 26) and continued to rise until the end of June (Epi. Week 30). After that, the curve stayed up until the end of July. In week 39, a steady and continuous decline in the number of reported cases has been observe, the Epi Weeks showed decrease in number of cases during the remaining period of 2017.

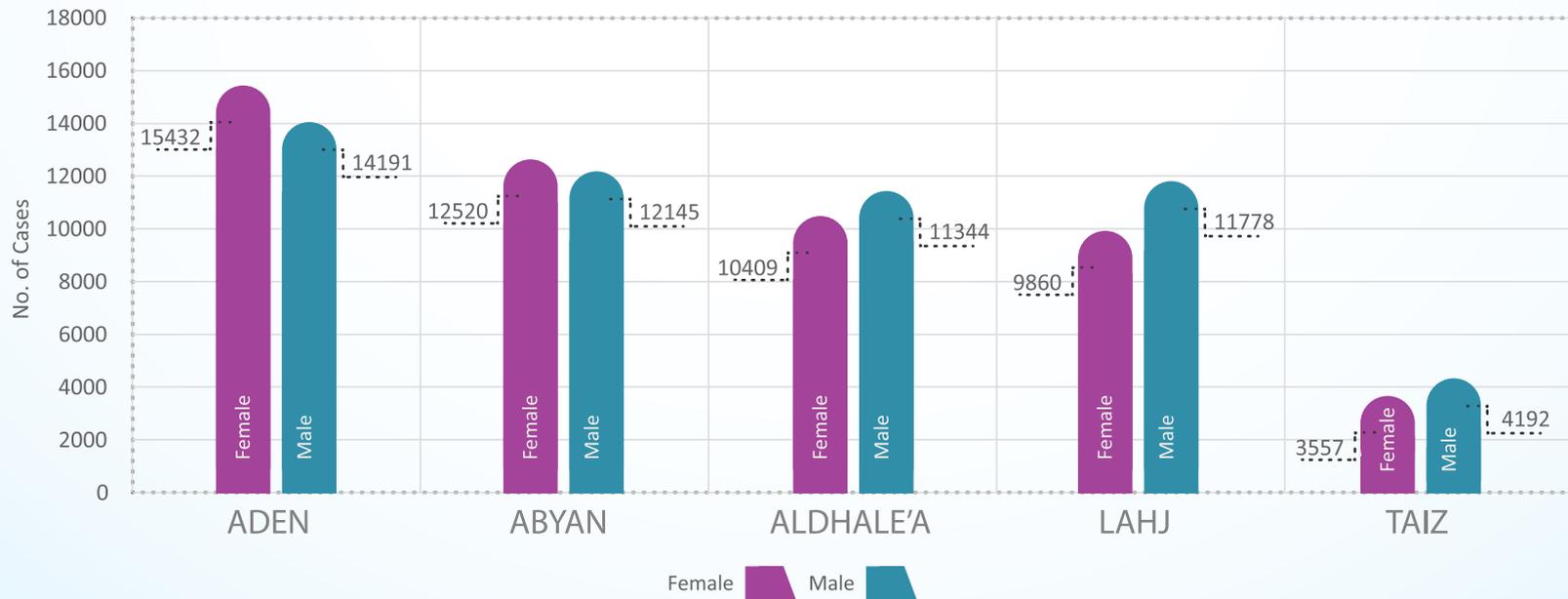


Project Statistics:

The project started the data collection by daily health facilities reports (sentinel surveillance) since 14 June 2017. Reported 105,428 suspected cholera cases from 14 June to 31 December 2017 in 41 districts of 5 governorates. There is no difference between males and females affected, 53650 (51%) and 51783 (49%), respectively Male to female ratio being 1:1.



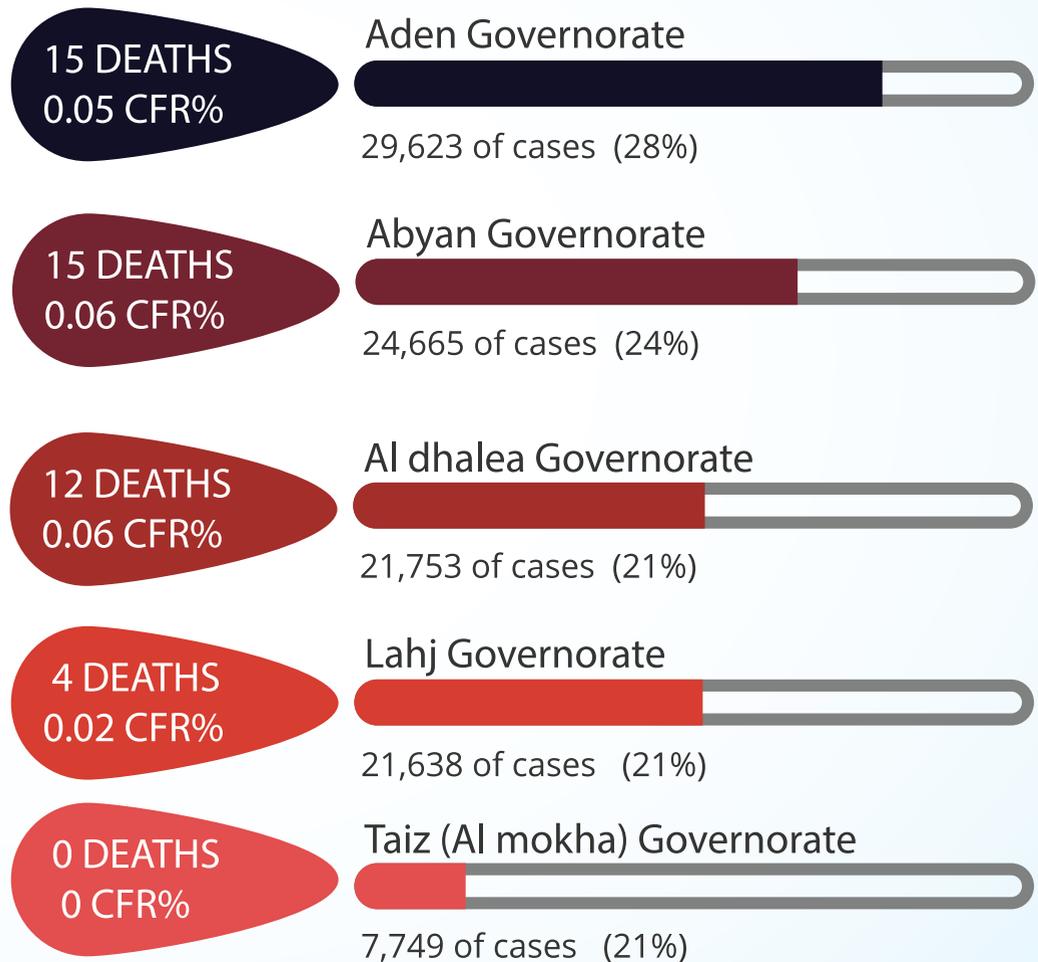
Distributed of Acute Watery Diarrhea by sex in targeted governorates,



Number of Deaths due to (cholera) and case fatality rate by province

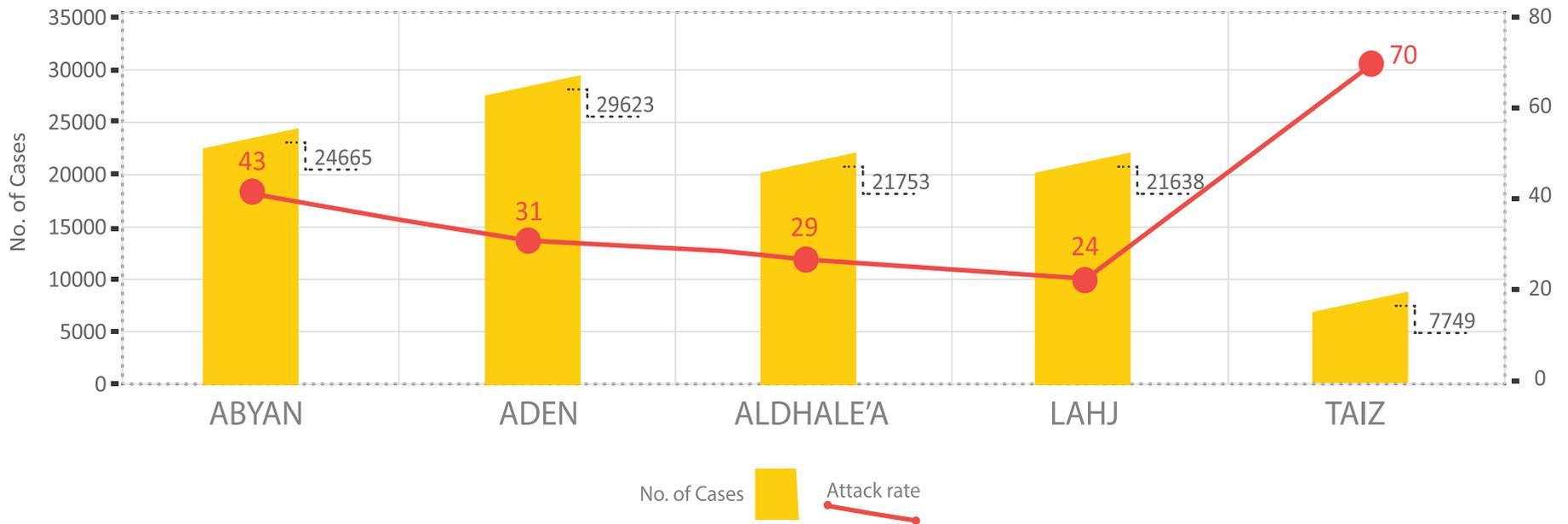
The 2nd wave of cholera outbreak started in April 2017, which was intensive with severe manifestations. There were 46 deaths reported from approved public health facilities in 5 governorates (Aden, Lahj, Abyan , Al Dhale'a and Taiz).

Number of cases
105,428
46 Deaths 0.04 CFR%

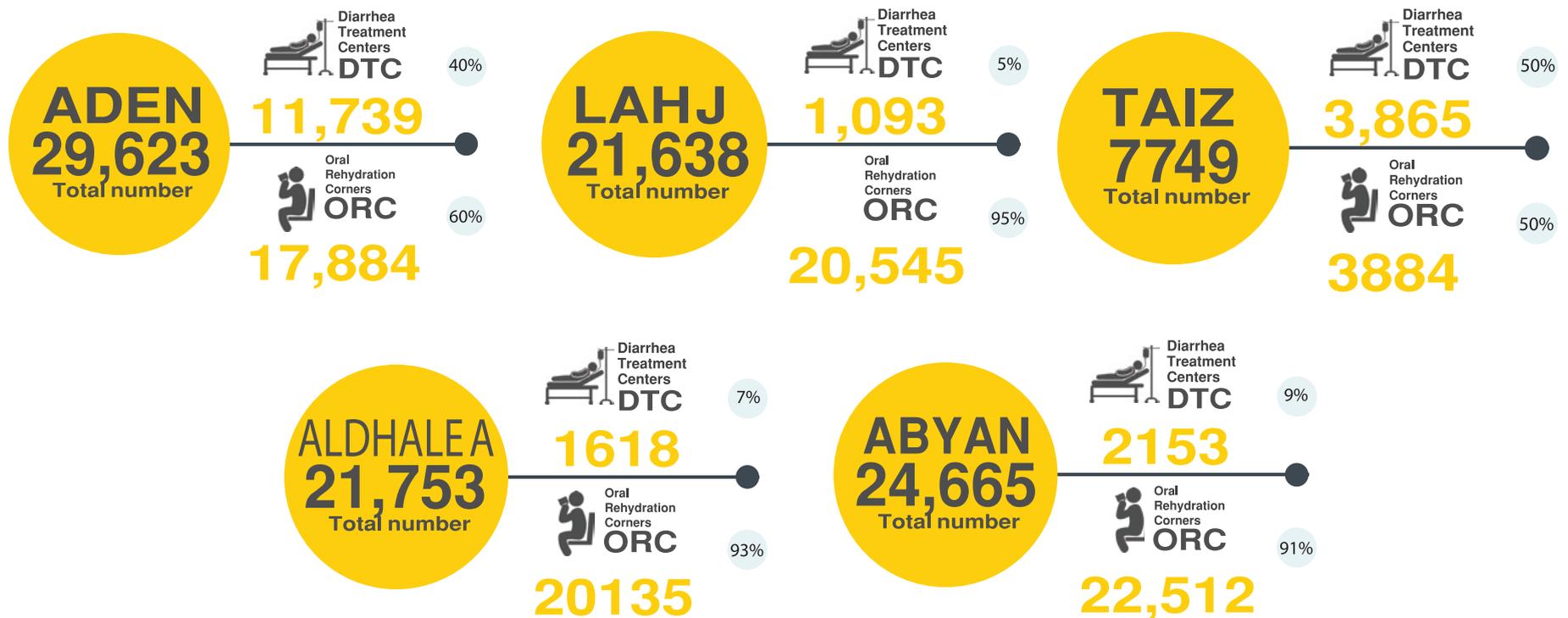


Attack rate of AWD cases by Governorates

The highest burden of cholera was in Abyan followed by Al Dhale'a and Aden. The three governorates with the highest cumulative attack rates per 1000 were Al Mokha - Taiz (70), Abyan (43) and Aden (31). The attack rate in all targeted governorates in (CRRP) was (33) per 1000.

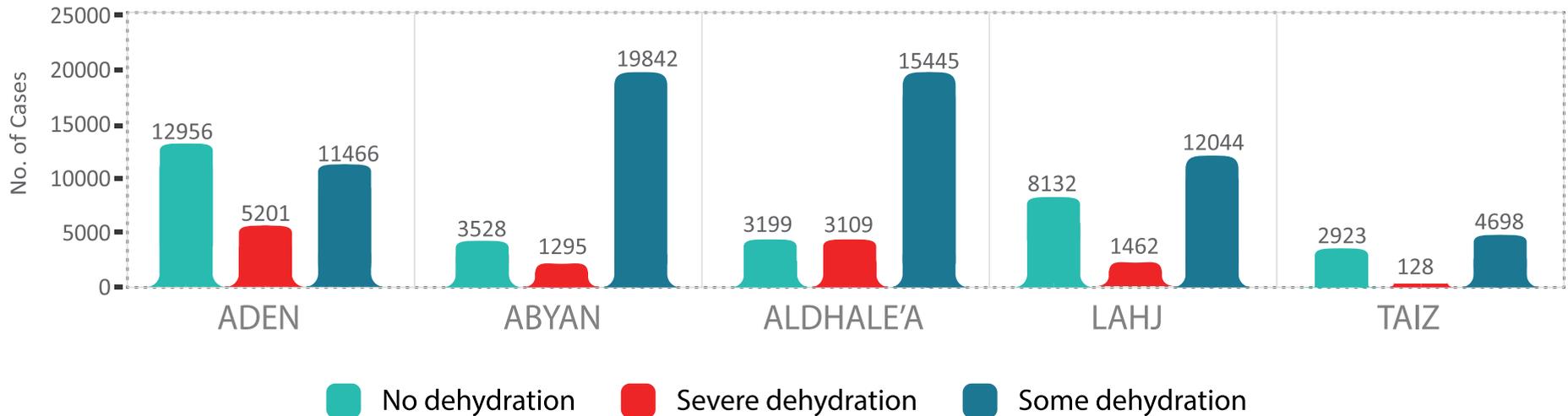


Distribution of AWD cases in DTCs & ORCs in targeted governorates



Distributed of AWD cases by status of dehydration in targeted governorates

The percentage of non-dehydrated patients to severely dehydrated patients was different from one governorate to another, but in general the physicians and health providers reported 11,195 (11%) as patients with severe dehydration, while 63,495 (60%) were diagnosed as AWD with some dehydration and 30,738 (29%) received oral rehydration solution (ORS) and health education as cases without manifestation of dehydration



بدعم



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منظمة الطفولة

برعاية



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تنفيذ

FMFC

المؤسسة الطبية الميدانية
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مشروع الإستجابة العاجلة لوباء الكوليرا

المجمع الصحي الشعب

مديرية صحة م/عدن

زوايا الأرواء
ORC



CUMULATIVE STATISTICS OF PROVIDING SERVICES IN CHOLERA RAPID RESPONSE PROJECT



88

cleaners and guards



49

administrative staff



712

Doctors, nurses and
pharmacists
work in the project



زاوية ارواء
ORC

establish 147 ORC
(oral rehydration corners)
to treat mild to moderate
dehydration cases



مراكز
معالجة
الاسهالات
DTC

opening 6 DTCs
(diarrhea treatment center)
to treat severe dehydration cases



distribute 16883
package of cleaning
materials



supply the targeted health
facilities with
83489 medical stuffs



provide 24480000
packets of ORS



providing
15800
bottles of
IV fluid



Trained 778 ORC
health workers about
treatment and diagnosis
of all types of dehydration



Distribute 600 chairs
and 180 tables



provide 332 water buckets



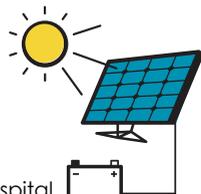
distribute 7000
hygienic kits

equiped the targeted
health facilities
with 125 beds
and 750 sheets
billows with covers



maintain the wash services
at 147 Health facilities

SOLAR
System



For DTC at Jahaf hospital
aldala GOV to provide 24 Hours services

5

Televisions

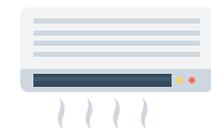
for featuring educative videos in the DTCs



18

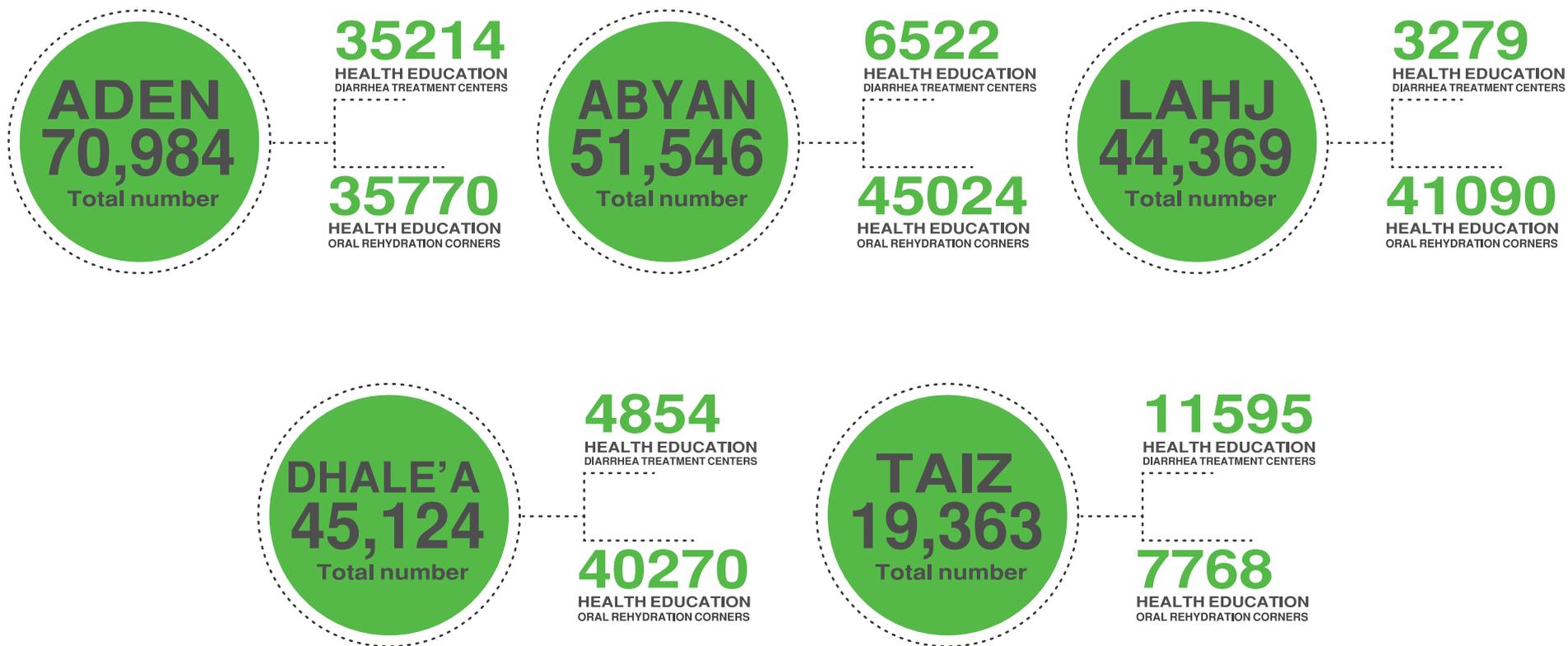
Air conditioners

to reduces high temperature at DTC admission rooms





TOTAL NUMBER OF PATIENTS AND ATTENDEES WHO RECEIVED HEALTH EDUCATION



يونسف
منظمة الطفولة
مجموعة البنك الدولي
منظمة
الصحة العالمية

Field

SUCCESS STORIES



Hashim Karim Mohammed a 4 years old child, was about to lose his life due to cholera infection that he got because of eating a contaminated food. He arrived to the hospital unconscious with sunken eyes and dry mouth because of severe watery diarrhea and vomiting.

Hashim could overcome cholera after he was treated at Al Sadaka Hospital, which is one of the DTCs supported by UNICEF - FMF in cholera rapid response project.

One of the doctors at DTC stated «Hashim was brought to the DTC on the morning of Thursday 2017/8/17, he was suffering from a severe watery diarrhea as a result of being infected by cholera”.

Hashim was given the proper medications and he was under observation for 3 days until he was cured.

Hashim's mother said « we knew via the social media what happens to the person who gets infected by cholera. Therefore, we ensured to observe my son's condition all the night, and we had to wait until the early morning to take

him immediately to the hospital, as our home is far from the hospital”. She added, “I was worried about my son, especially when the diarrhea and vomiting continue, and I was scared that he will lose his life. Now I am happy that my little boy is well and smiling as he was before. She then thanked Allah and added, «I am thankful to UNICEF-FMF as they helped my son to regain his health and happiness”



BEFORE



AFTER

Raibh shumillah saeed a -25years-old woman, whom didn't expect that she got cholera infection. She thought that the diarrhea she had, was a result of eating a lot of meat during Eid al-Adha occasion .

After one day of suffering from diarrhea and vomiting, Raiba was brought by her family to Ebin-Khaldoun Hospital, one of the acute diarrhea treatment centers in cholera response Project that is implemented by the Field Medical Foundation and funded by UNICEF.

One of the doctors at# Ebin-khaldoun hospital stated ...» Raibh was brought in the morning of the fourth day of Eid Aladha and she was severely fatigue as a result of severe diarrhea and vomiting accompanied by severe dry mouth and tongue, sunken eyes , and inability to drink . I gave her appropriate medical treatments according to the protocol followed for such cases.

Raibh overcame cholera infection after she received treatments at Ebin- Khaldoun Hospital, where she stayed for a week during which she was under close observation of her health condition .She received IV fluid , ORS and zinc tablets until she got well.

“I did not expect that my complaints were caused by cholera infection,» Riba said. «I thought it was just because of eating too much meat on the occasion of Eid al-Adha.» She added “My family and I began to fear after diarrhea and vomiting got severe and i was about to lose my life, but now I am happy that I have regained my health and well-being. Thank God, who has recovered me, and thank UNICEF and FMF medical, for contributing mainly in my cure.



BEFORE



AFTER

CHALLENGES & RECOMMENDATIONS

CHALLENGES:

- Lack of commitment of some health workers to work on diagnosing cases according to the standard definition of cholera has led to an increase in the number of cases registered at governorates .
- The poor infrastructure of the health system, which has been affected by the recent conflict, has formed a challenge on the health services provision.
- The intensity of the cholera cases at the beginning of the project has led to a delay the rehabilitation process of the health facilities.
- Poor connectivity and mobile networks at some districts. has led to delay in collecting the daily reporting of the cases.
- Due to some security issues, there has been a delay in delivering some medicines and equipment by the donor.

RECOMMENDATIONS:

- Implementing WHO acute watery diarrhea guidelines should be mandatory in both public and private sectors.
- Ensuring regular training for epidemiologists, clinicians, laboratory and other health services providers to improve the knowledge about case definition and case management.
- Creating a comprehensive plan for epidemic preparedness in collaboration with local and international organizations.
- Supervising, monitoring and evaluating cholera control activities.
- Coordinating the efforts of various governmental sectors, and local and international partners.
- Ensuring that all medicines and supplies are appropriate and correspond to the needs as estimated from the analysis of the epidemiological situation.
- Estimating and Pre-positioning of Diarrhea Treatment Kits, other necessary emergency health items and equipment at/near to hot spots prior to expected outbreak season.
- activating and capacity building of Rapid Response Teams consisting of 6-4 Doctors & 6-4 Paramedics/Nurse from Public Sector Health Facilities, and Sanitation staff in each district.

KAP STUDY

**COMMUNITY AWARENESS AND
PRACTICES RELATED TO DIARRHEA/
CHOLERA IN SELECTED DISTRICTS
IN ADEN**

Funded by FMF



KAP Study:

This study aimed to assess the community awareness and practices with regard to diarrhea and cholera, in the context of the last cholera epidemic (since April 2017) in areas with high and low epidemic.

The objectives of the study regarding diarrhea and cholera:

1. To examine respondents' awareness in disease nature, transmission and prevention.
2. To identify respondents' practices regarding safe water, sanitation, hygiene and access to healthcare.
3. To identify community misconceptions.
4. To provide data to relevant stakeholders that may be helpful in informing future diarrhea/ cholera related community mobilization efforts.

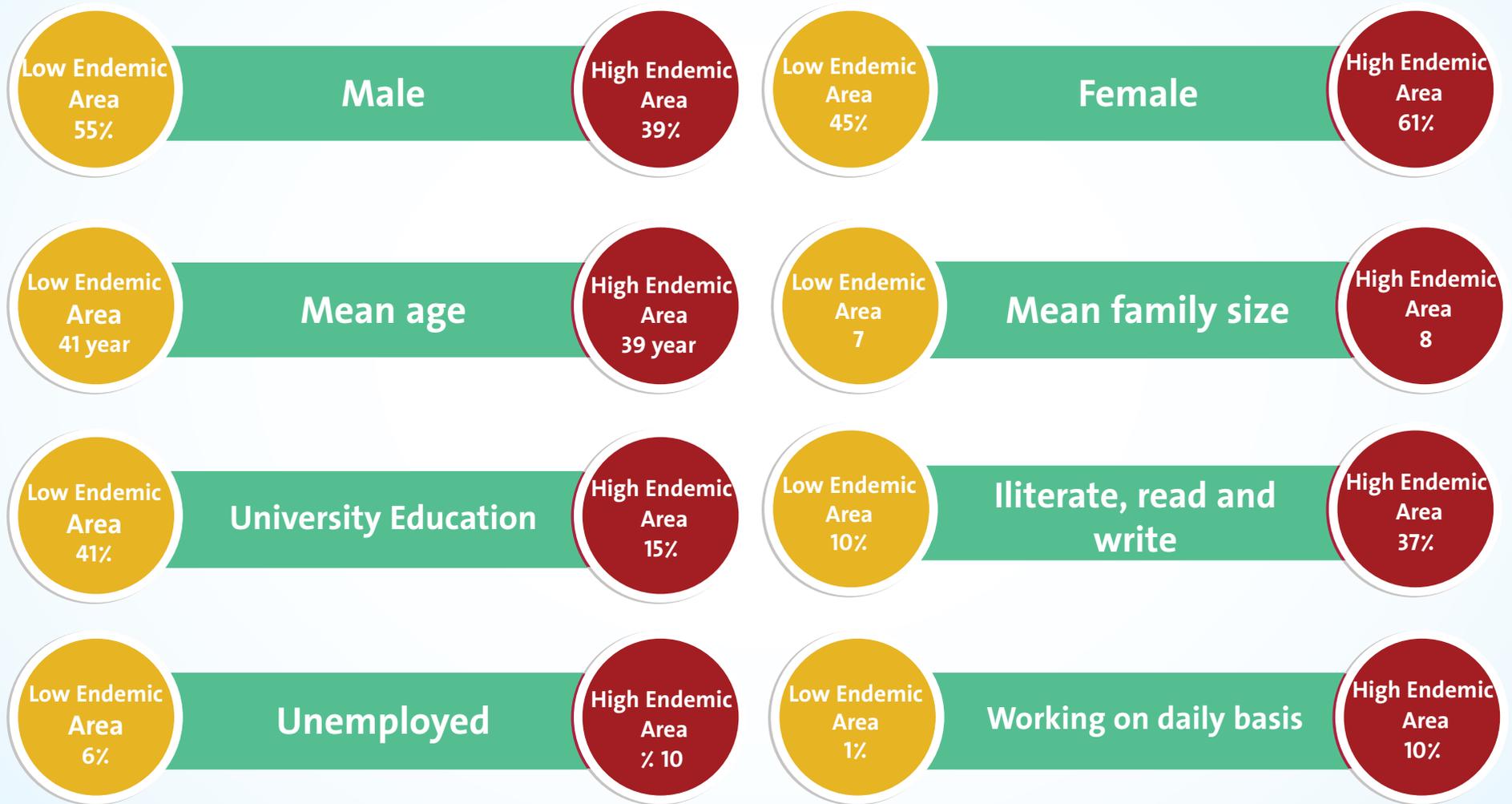
Methodology:

A community-based comparative cross-sectional study with a house to house survey in September– October 2017 in two high attack rate (AR) districts (Dar Saad and Al-Maalaa) and two districts with very low AR (Almansoura and Khormaksar) in Aden governorate, with a total sample size of 420 household.

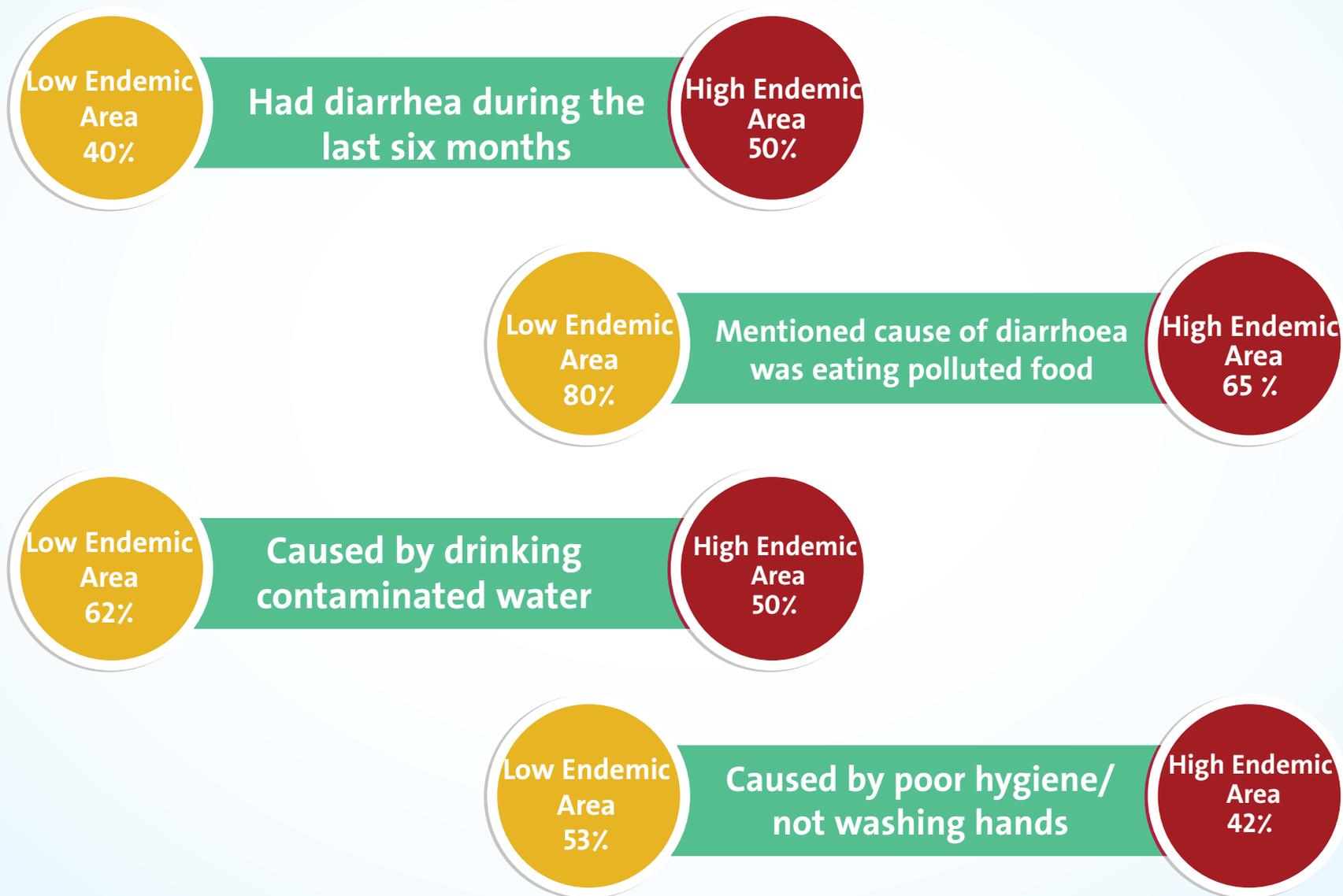
High Endemic Area HEA		Low Endemic Area LEA	
District	No of respondents	District	No of respondents
Dar Saad	158	Almansoura	152
Al-Maalaa	70	Khormaksar	60
Total	228	Total	212

Main Significant Results

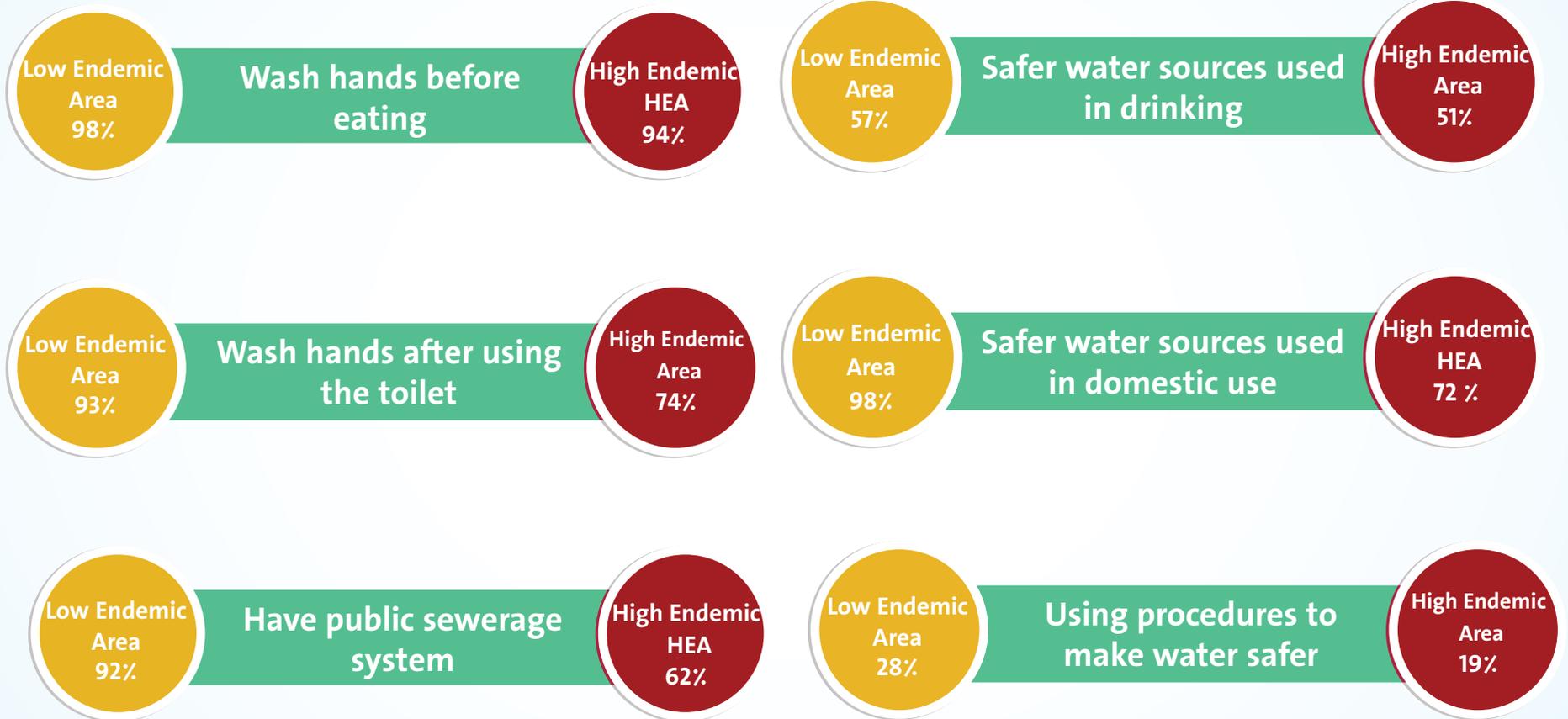
1- SOCIO ECONOMIC STATUS:



2- KNOWLEDGE ABOUT DIARRHEA AND ITS PREVENTION



3- WATER, SANITATION AND HYGIENE (WASH)



4- EXPOSURE TO EDUCATION ABOUT DIARRHOEA PREVENTION

Low Endemic
Area
57%

Educational/preventive materials/
products were received

High Endemic
Area
76%

Low Endemic
Area
60%

Soap was received as
preventive product

High Endemic
Area
72%

Low Endemic
Area
48%

received chlorine
solution/tablets

High Endemic
HEA
48%

Low Endemic
Area
5%

ORS was received by

High Endemic
Area
28%

5- KNOWLEDGE ABOUT DIARRHOEA AND CHOLERA TREATMENT

- About two thirds (%64,8) mentioned that patients must go for a health facility to seek treatment for diarrhea.
- Almost %70 mentioned the correct health facility they should go to.
- However, HEAs respondents significantly need ≥ 30 minutes (%13,7) than respondents from LEAs (%5,6).

Conclusion and Recommendations

The findings revealed that the respondents had partial awareness and suboptimal practices related diarrhoea and cholera prevention and health seeking behaviour. LEAs respondents are generally more knowledgeable compared to HEAs respondents. Educational interventions and its delivery approaches should be specifically tailored and culturally sensitive to the setting's peculiarities.

Socioeconomic characteristics, water sources and management, Hand hygiene and sanitation

Socioeconomic variables including water and sanitation constitute the most striking differences between the HEAs and LEAs. This led to the conclusion that socioeconomic variables –including water and sewage system- were the main predictors for the AWD incidence and deaths and should receive priority attention by the stakeholder.

Educational and preventive materials received

There were some discrepancies related to the current outbreak preventive and control measures, which stakeholders should consider in the design and implementation of future outbreak prevention and control activities.

Such education – received products discrepancies necessitate improving the design, content and implementation of education campaigns taking in consideration the educational/ cultural background of the beneficiaries and to invest more in the widely acceptable methods and materials for education and prevention.

Knowledge about diarrhea /cholera causes, prevention and treatment

Respondents have suboptimal knowledge and practices regarding diarrhoea and cholera causes, prevention and treatment. Although 95% of the respondents mentioned at least one cause correctly, 96% reported AWD as the main symptoms of cholera, gaps and misconception remains. However, the knowledge of causes, prevention, treatment and the reported hygienic practices were generally better in LEAs. Furthermore, ORS as an important asset in diarrhoea treatment was acknowledged by only minority of respondents (70% for diarrhoea and 89% for cholera).

Timely outbreak investigation as well as case-control studies along with the KAP study at the beginning of any outbreak are highly recommended in order to adapt the educational messages and interventions with the most efficient and effective intervention in relation to the context.

People need to be better educated about the use of ORS and the primary health facilities and the health services that they provide, in order to get proper and timely treatment.