

ZAMBIA SITUATION REPORT NO. 36




Disease Outbreak: COVID-19	Response start date: 30 th January, 2020	Outbreak Declared: 18 th March, 2020
Date of report: 23 rd April, 2020	Prepared by: MOH/ZNPPI/WHO	Correspondence: ims.covid@znphi.co.zm

1. 1. SITUATION UPDATE

1.1 CURRENT CASE NUMBERS




- As of 17:00 hours on Thursday, 23rd April, 2020:
 - There were **2 new confirmed cases of COVID-19, 2 recoveries and no deaths** recorded in the past 24 hours.
 - The total number of confirmed cases recorded to date is **76, with 3 deaths (CFR=3.95%) and 37 recoveries** (Refer to Annex 1).
 - All confirmed cases are admitted to designated isolation facilities. There are currently **36 active cases**; 31 in Lusaka, 4 on the Copperbelt and 1 in Kabwe.

Zambia Numbers

-  **76 Confirmed (2 new)**
-  **3 Deaths (0 new)**
-  **37 Recoveries (2 new)**

Global Numbers

(Source: JHU)

-  **2,699,338 confirmed (70,811 new)**
-  **188,437 deaths (5,013 new)**
-  **737,735 recoveries (# adjusted)**

*New: in the last 24hrs

1. EPIDEMIOLOGICAL HIGHLIGHTS

Table 1: COVID-19 Surveillance and case management summary, based on 23rd April 2020 report

Parameter	Number
Cumulative number of high risk persons under observation	9,657
Cumulative number of high risk persons that have completed 14 days observation	2,796
Cumulative number of alerts notified & verified as non-cases	982
Number of suspected cases reported today	33
Cumulative Number of Samples Received	4,665
Total Number of Results Processed	4,245
Total Number of Confirmed COVID-19 Positive Cases	76
Total number of currently isolated positive cases	36

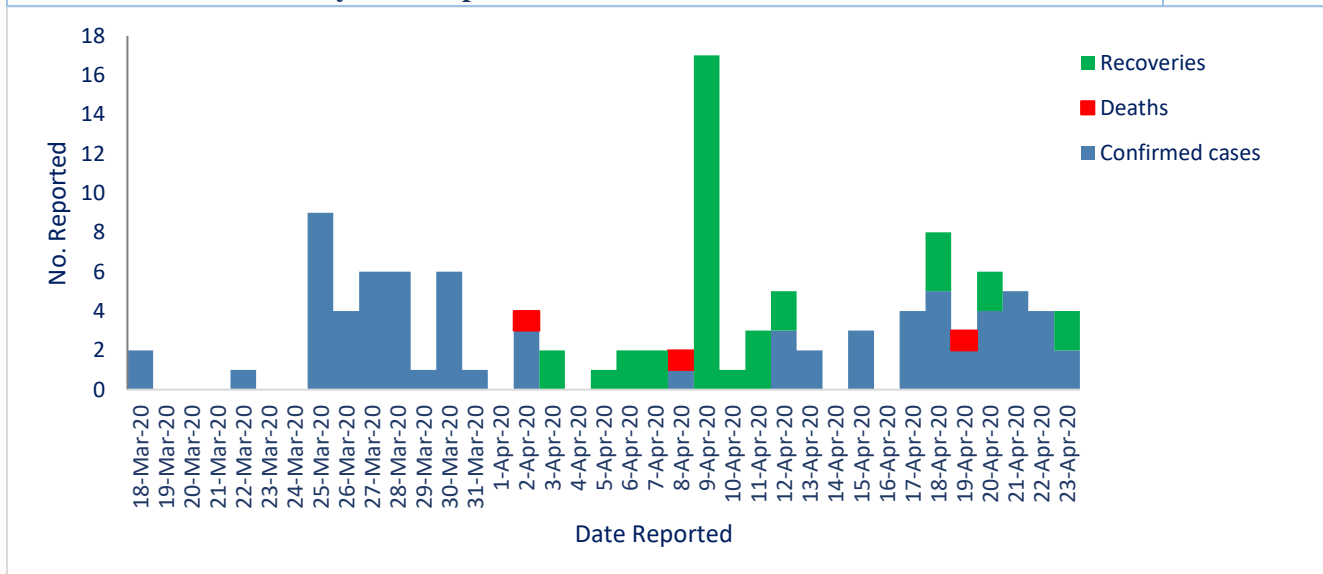


Figure 1: Epi-curve of COVID-19 confirmed cases (N=76), deaths (N=3) and recoveries (N=37) as of 23rd April 2020

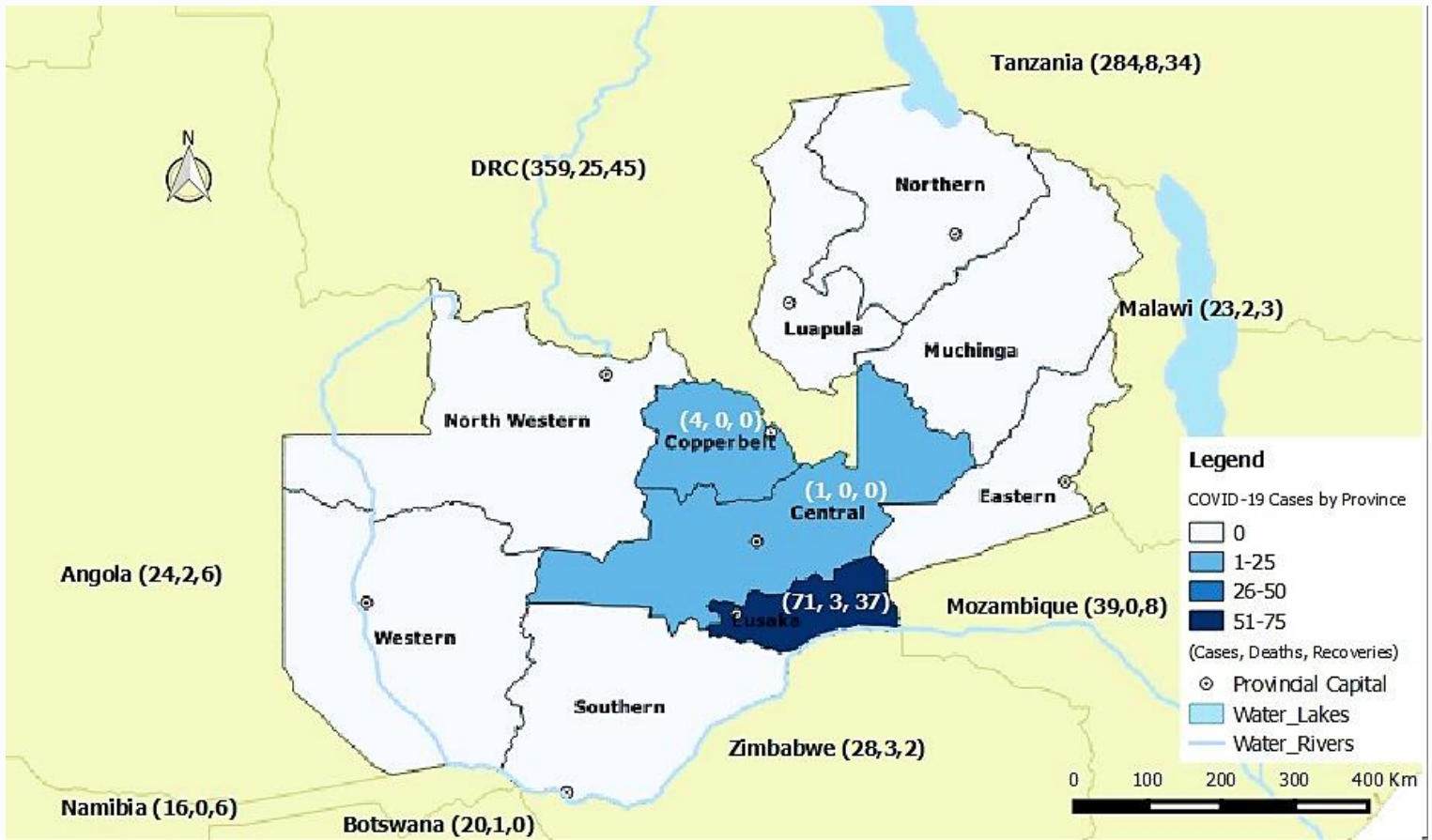


Figure 2: Map of Zambia showing confirmed COVID-19 cases, deaths and recoveries (in brackets) by province, as well as confirmed cases, deaths and recoveries (in brackets) in neighbouring countries as of 23rd April 2020

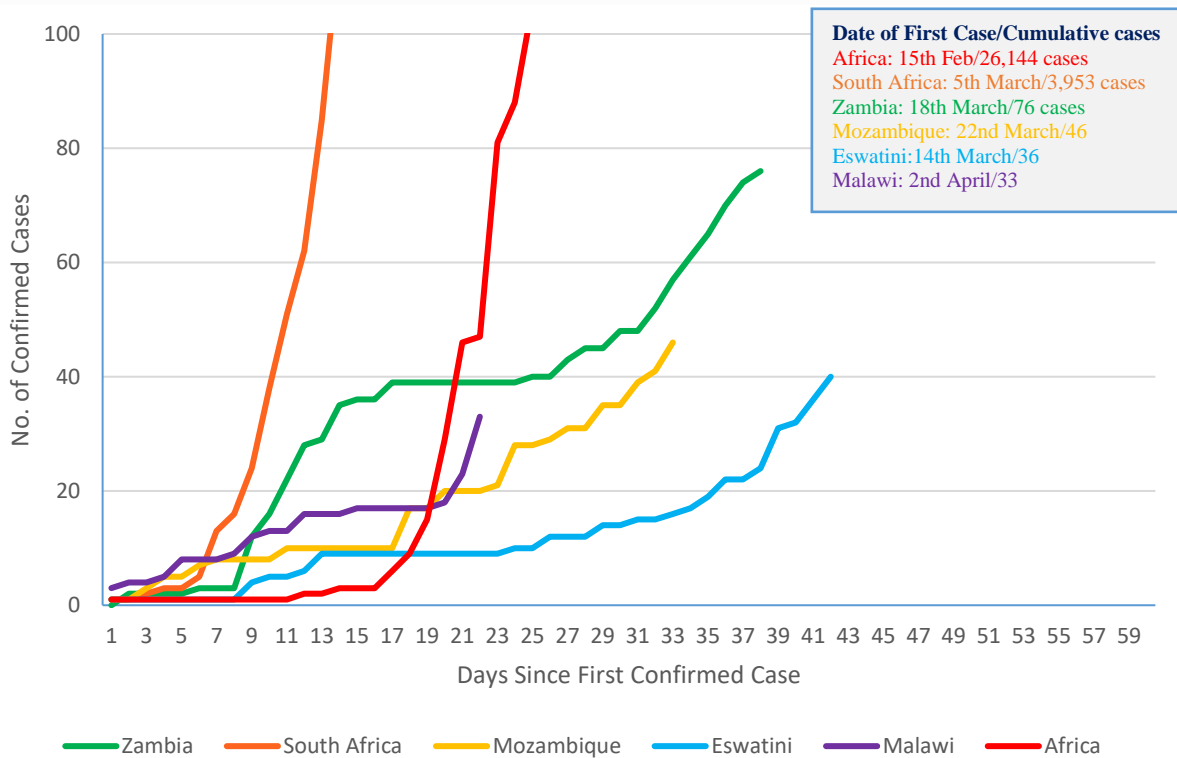


Figure 3: Cumulative trend graph comparing top 5 countries in Southern Africa with highest case numbers and the whole of Africa recorded during the first 70 days (Sources: MoH Zambia, NICD South Africa, Africa CDC)

Table 2: Summary of COVID-19 cases recorded country-wide as of 23rd April 2020

Reporting Province	New Cases	Total Confirmed Cases	New Deaths	Total Deaths	New Recoveries	Total Recoveries	Transmission Classification	Days since last confirmed case reported
Lusaka	0	71	0	3	2	37	26 Imported 45 Local	0
Copperbelt	2	4	0	0	0	0	4 Imported	0
Central	0	1	0	0	0	0	1 Local	7
Southern	0	0	0	0	0	0	N/A	N/A
Eastern	0	0	0	0	0	0	N/A	N/A
Western	0	0	0	0	0	0	N/A	N/A
Northern	0	0	0	0	0	0	N/A	N/A
N/Western	0	0	0	0	0	0	N/A	N/A
Luapula	0	0	0	0	0	0	N/A	N/A
Muchinga	0	0	0	0	0	0	N/A	N/A
Total	2	76	0	3	2	37	30 Imported; 46 Local	

Local transmission: where the source of infection is within Zambia; Imported transmission indicates where cases have been acquired outside Zambia.

- **Age and Sex distribution:** Of confirmed cases 62% are male and 38% are female. The most affected age group remains those aged between 15-30 years old, with 35% of the confirmed cases falling in this age bracket, followed by the 45-60 age group (24%) and 31-44 age group (22%).

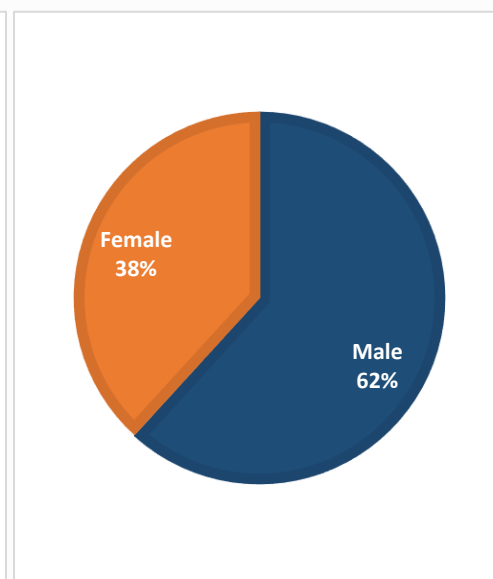
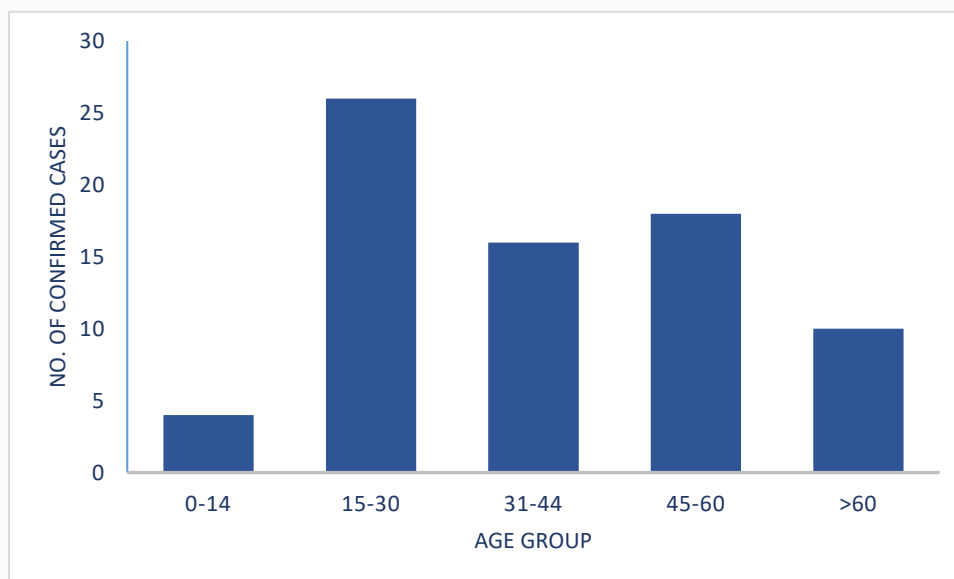


Figure 4: Age and Sex distribution of confirmed cases, as of 23rd April 2020

➤ ACTIONS TO DATE

2.1 CO-ORDINATION

- **Regional/Continental level:** Zambia hosts the Southern Africa Regional Collaborating Centre of the Africa CDC and has been coordinating the response at regional level. To date, Southern Africa has recorded 3,905 confirmed cases of COVID-19 including 79 deaths and 1,124 recoveries. Zambia continues to participate in AU meetings to ensure continued regional and continental trade and strategies to stop transmission of COVID-19.
- **Policy Level:** The **COVID-19 contingency plan** continues to be regularly updated as the outbreak evolves. The government continues to enforce the measures and interventions to control the spread of COVID-19 countrywide as outlined in the Statutory instruments **SI21 and SI22 of 2020 on COVID-19 and presidential directives** issued in March 2020. The measures include wearing of a mask while out in public; continued screening of travellers into Zambia; redirection of all international flights to land and depart from KKIA only; suspension of non-essential travel to countries with confirmed COVID-19 cases; restriction of public gatherings; restaurants to operate only on take away and delivery basis; and closure of all bars, nightclubs, cinemas, gyms and casinos.
 - It is estimated that ~30% of health workers are likely to become infected with COVID-19 in the course of duty. Following the rising number of health workers confirmed as COVID-19 cases, the government has directed that IPC measures in health facilities must be reinforced in order to protect frontline health workers. These include reorientation of all staff in IPC practices, designated senior members of staff assigned to enforce IPC compliance, increased stock of PPE to guarantee availability for all staff, and additional manpower assigned to ensure disinfection of all surfaces.
 - Following continued disregard of quarantine directives, travellers into Zambia will be isolated at designated facilities, including 4 identified hotels, at own cost while awaiting test results.
 - Meetings of the Committee of Ministers, Committee of Permanent Secretaries, and the National Epidemic Preparedness, Prevention Control and Management Committee (NEPPC&MC) have been convened since the declaration of the outbreak
 - Press briefings are held daily on the evolving outbreak situation in Zambia.
- **Technical level:** The ZNPPI continues to provide leadership and partner collaboration on the response.
 - The IMS continues to meet at the ZNPPI (with a Zoom link provided to ensure social distancing) on Tuesdays and Thursdays. (Refer to Annex 2 for structure)

- All the response pillars under the IMS have an Incident Coordinator whose responsibility it is to map the partners and resources for the respective units to ensure no duplication of efforts and resources. Public Health Specialists in each of the sub-districts in Lusaka serve as Incident Commanders and coordinate daily activities of field teams.
- Technical co-ordinating meetings are being held with cooperating partners and other stakeholders. The meetings are chaired by the Director, ZNPPI

2.2 SURVEILLANCE AND OUTBREAK INVESTIGATION

Surveillance is being actively conducted around the country at community level, health facilities, points of entry (POEs), and sentinel sites. Efforts for rapid detection of any cases of COVID-19 in Lusaka, Kabwe and Kafue continue including testing, contact tracing, monitoring of persons under quarantine and adherence, verification and follow up of alerts and timely transport of cases to isolation facilities. Sub-district teams continue to carry out quarantine adherence monitoring, follow up of confirmed cases, contact tracing, follow up and verification of alerts, and risk communication

- **Case finding:** The two new cases reported involve a couple, both 45-years-old of Chingola, Copperbelt Copperbelt province with a history of travel to Tanzania for business activities in the last two weeks.
- **Update on suspected death reported on 21st April:** following investigation into the death of a Choma resident at the UTH, the results of the test for COVID-19 were negative.
- **Contact Tracing:** Investigations to trace and screen all contacts remain in effect. Rapid response teams in Kabwe, Kafue and Lusaka continue to conduct mass screening and contact tracing. Surveillance teams also continue to actively follow up contacts of confirmed cases and community alerts.

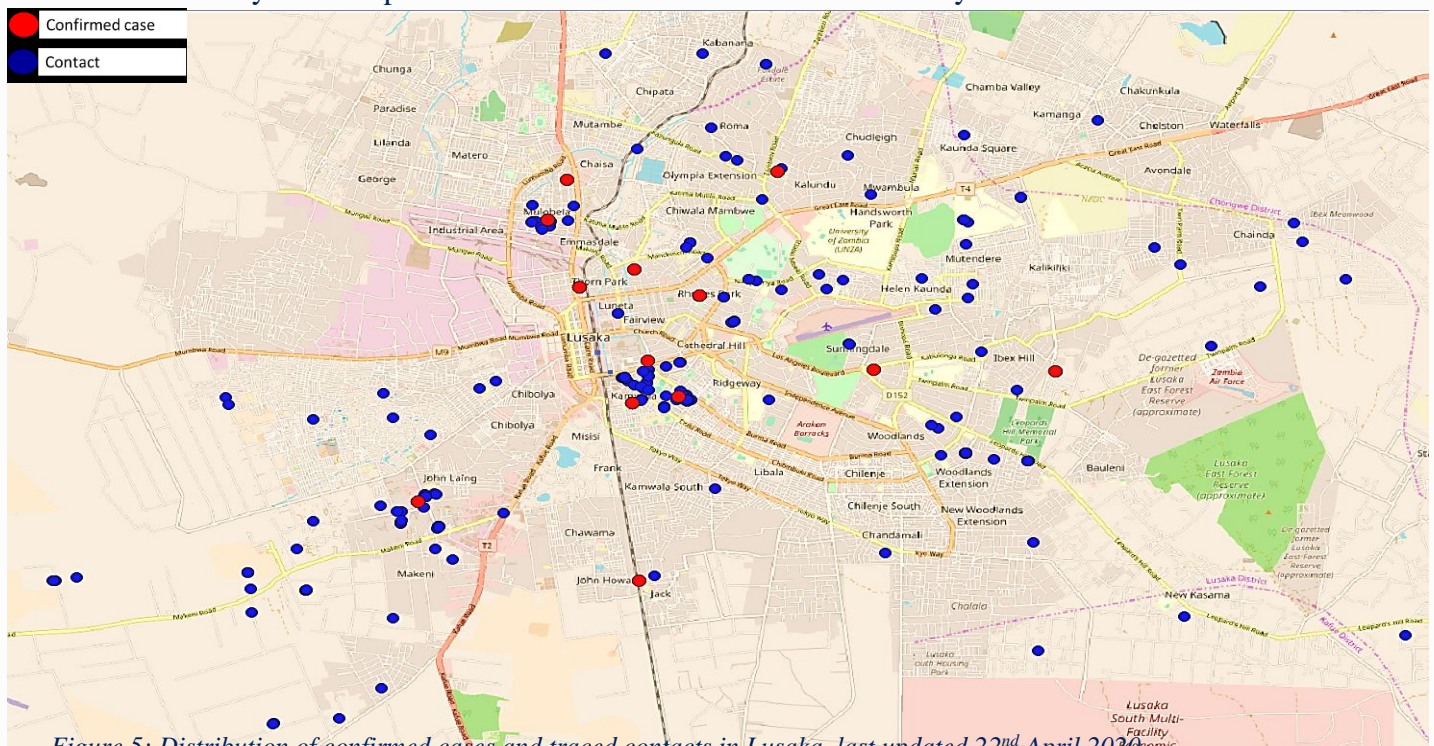


Figure 5: Distribution of confirmed cases and traced contacts in Lusaka, last updated 22nd April 2020

- **Points of Entry:** Active screening continues in all PoEs. Trucks entering the borders carrying essential commodities proceed to their destination under secure escort, at which point the drivers are placed under quarantine pending test results. Other activities conducted:
 - POE staff in Chanida, Mfuwe, Lusunthe and Mwami were trained on COVID-19 basics and IPC
 - Updated data on all screening at POE across the country is available in Table 3 below
 - The International Organisation for Migration (IOM) has come on board to support training of POE staff in IPC and supply of commodities such as PPE, screening tools and IPC commodities.
 - The mapping exercise of POEs was finalised, with 61 designated, authorised and unofficial POEs identified.
 - Four hotels have been identified to serve as quarantine facilities for international travellers into Zambia, namely the Radisson Blue, Hilton, Cresta Golfview and Fallsway. Accommodation will be at the travellers' own cost.

Table 3: Countrywide POE Summary Report for the period 29th January-15th April 2020

Parameter	Total Number Recorded
Flights	3251
Trucks	2017
Marine	2120
Dry Port	11
Quarantined truck Drivers	363

- **Laboratory:** There are currently 3 designated laboratories for COVID-19 diagnostics, namely the University Teaching Hospital Virology Lab (UTHVL) (WHO-certified National Influenza Centre), the School of Veterinary Medicine (SVM), UNZA and the Tropical Diseases Research Centre (TDRC) on the Copperbelt. A sample referral system is in place for samples being collected in other provinces. Zambia is utilising **Polymerase Chain Reaction (PCR) testing** for COVID-19 diagnosis. Some rapid diagnostic testing (RDT) has been conducted using a total antibody test (IgM and IgG). The RDT has an 86.43% sensitivity and 99.57% specificity. However, preliminary data has shown that there is a higher likelihood of false positives and false negatives within the first 3-5 days of infection; sensitivity does increase by day eight. Therefore, any results from the RDT have to undergo confirmatory testing with PCR.
 - In the last 24 hours, **205 PCR tests** were conducted; **two (2)** of which were positive. A total of **4,665 samples** have been received to date; of these, **4,245 results** have been processed with **76 confirmed positive (1.79% positivity rate)** for SARS-CoV-2. The testing coverage is **252 per 1,000,000 population**. The summary of tests conducted to date is available in Annex 1

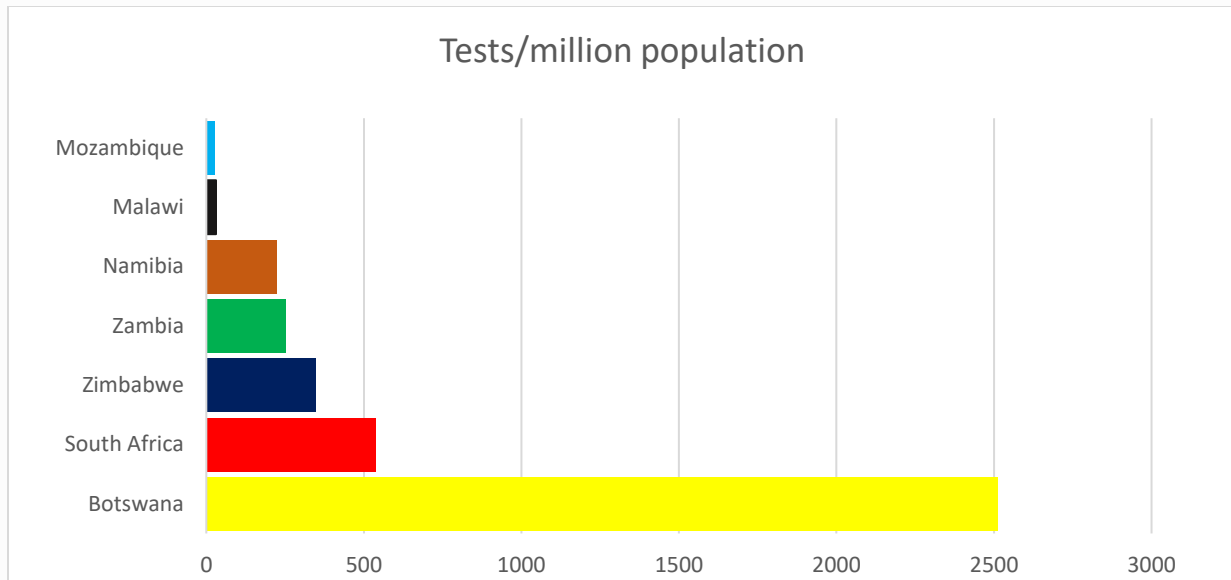


Figure 6: COVID-19 testing trends: Number of tests (per million people) by Country in Southern Africa (based on available online reports)

- The standard turn-around time for the PCR test is 24 hours, but can take up to 36-48 hours where repeat or confirmatory testing is required
- Testing of community alerts, suspects under quarantine, contacts of confirmed cases as well as re-testing of confirmed cases is ongoing.
- **Criteria for testing:** individuals who meet the case definition or individuals who have had contact/been exposed to a confirmed positive case and/or are symptomatic. Testing is being expanded in all communities with confirmed cases.

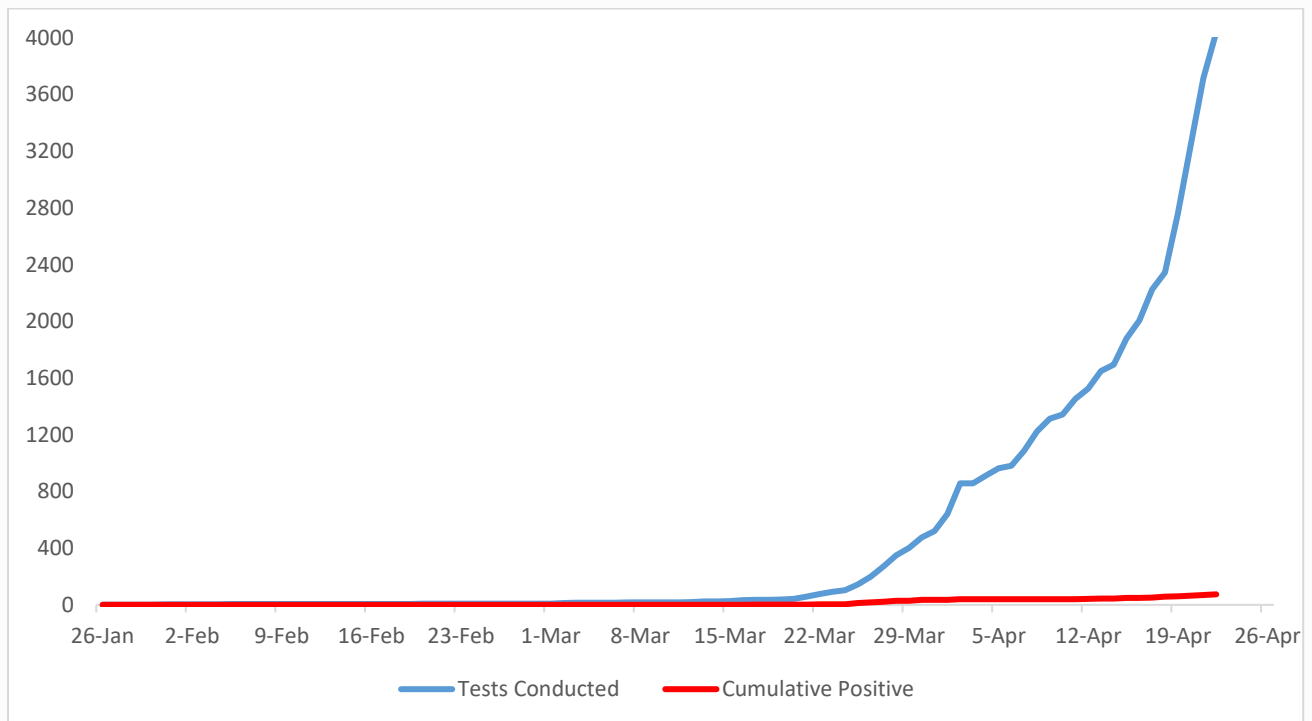


Figure 7: Graph showing cumulative number of PCR tests conducted vs confirmed cases as of 22nd April 2020

- **Case Management:** All confirmed cases are admitted to the designated isolation facilities. *Patients are only considered recovered once they record two negative re-test results within a 24hour period.* Refer to Annex 1 for detailed summary. Additionally, all health workers are required to undergo 14-day quarantine following their shift at the isolation facilities before they return to their communities. There are currently **36 active COVID-19 cases** being managed at various facilities.
- **Levy Mwanawasa Hospital:** In the last 24 hours, the facility had no new admissions of confirmed cases and 2 recoveries. There are currently 22 patients admitted at the facility (all confirmed positive). All patients are stable.
 - **Courtyard facility:** In the last 24 hours, the facility had no new admissions of confirmed cases. There are currently 9 patients admitted at the facility (all confirmed positive). All patients are stable
 - **Masaiti District Hospital:** In the last 24 hours, the facility had 2 new admissions of confirmed cases; no recoveries were recorded. There are 4 confirmed positive cases still admitted; all patients are in a stable condition.
 - **Kabwe Mother, New-born and Children’s Hospital:** In the last 24 hours, the facility had no new admissions; there is currently 1 confirmed case admitted.
 - **COVID-19 Screening Facilities:** Dedicated screening structures have been set up at the UTH and Levy Mwanawasa, away from the areas of routine service delivery.
 - **Isolation facilities** have also been set up in all high risk districts across the ten provinces; a detailed list is available at Annex 4
- **Outbreak Investigation:**
- The Ministry of Health through the ZNP HI has received ethical clearance to conduct two of its planned research activities to date, namely a prospective study on the first few cases of COVID-19 in Zambia, their close contacts and the transmission dynamics, severity, and clinical spectrum of infection; and a spatio-temporal analysis and predictive modelling study on COVID-19.

2.3 INFECTION, PREVENTION AND CONTROL (IPC)

➤ **Activities conducted include:**

- Monitoring of IPC practices in Health care facilities
- Logistical support for IPC equipment and Materials with support from UNICEF to isolation and quarantine areas.
- Training of HCWs at Levy Isolation facility in IPC with support from World Vision
- Designated ETHs to enforce IPC standards in all isolation facilities

2.4 RISK COMMUNICATION AND COMMUNITY ENGAGEMENT (RCCE)

➤ Activities conducted include:

- Intensified community sensitisations in communities especially in sub-districts of Lusaka and Kafue
- Distribution of IEC materials
- Translation of COVID–19 IEC materials in local languages
- Radio announcements
- Radio discussions
- Monitoring & technical support on COVID in four provinces
- Community engagement and sensitisations in markets & bus stations

3. GAPS AND CHALLENGES

- **Surveillance and outbreak investigation:** Inadequate electronic data tools for field operation; low testing coverage (252 per 1,000,000 population).
- **Case management:** increasing number of HCWs getting infected; additional oxygen, ventilators and accessories required; upgrade required for a number of isolation facilities outside Lusaka
- **Laboratory:** Long laboratory turnaround time (backlog of samples); manual data entry delaying reporting of results
- **IPC:** Non adherence to IPC standards; limited PPE stocks; inadequate number of HCWs trained in IPC especially outside Lusaka
- **Risk Communication:** continued myths and misconceptions in the community including fear regarding tainted swabs and perception that COVID-19 only affects affluent populations; insufficient PA systems in the provinces; require support for community sensitisation
- **POEs:** highly porous borders

4. PRIORITY ACTIONS AND RECOMMENDATIONS

- **Surveillance and outbreak investigation:** Upload new integrated screening forms and test electronic data capturing tool; continued mass screening and contact; continued active case finding, monitoring of quarantined persons and responding to community alerts country wide
- **Case Management:** Re-training of HCWs in IPC; introduction of IPC competence evaluation for HCWs in isolation; Psychological evaluation of all infected HCWs; Complete facility based trainings for Livingstone and Kabwe; Finalise treatment protocols; Identify surge staff for UTH isolation centre
- **Laboratory:** Trial of new sample extraction methods (Daan Extraction kit donated by the Jack Ma Foundation, Easy Mag reagents donated by ZPRIME CVS Project) and test use of RT-PCR machine offered

for use by ZAMBART; Streamline sample registration procedures in consultation with field teams; Include more data entry clerks to the team.

- **IPC:** Conduct IPC training for HCWs at Tubalange, UTH & Bauleni isolation facilities; Preposition adequate PPEs in all isolation facilities; Escalate training of IPC trainings to other provinces in the country; Assess isolation facilities in 6 remaining provinces
- **RCCE:** Print revised translated COVID – 19 IEC materials; Intensify PA in Communities; Continued Radio announcements; Continue distribution of IEC materials; Continued sensitisations in markets & bus stations
- **POEs:** POE training & supply of IPC commodities in Eastern province, Kasumbalesa and Nakonde with support from IOM; Assessment of all the 61 designated, authorized and unofficial POEs; Training of 30 community change agents

5. CONCLUSION

In the last 24 hours, Zambia recorded 2 new confirmed cases of COVID-19 in Chingola and 2 recoveries from Levy Hospital. Community alerts continue to play a key role in rapid detection of cases. Key interventions for the outbreak response continue to be implemented across the country with high level government support including multi-sectoral coordination, district level response team deployment, rapid detection and isolation of cases, hot spot identification and focused interventions.

ANNEX 1: EPIDEMIOLOGICAL DATA AS OF 17:00HRS ON 23rd APRIL 2020*

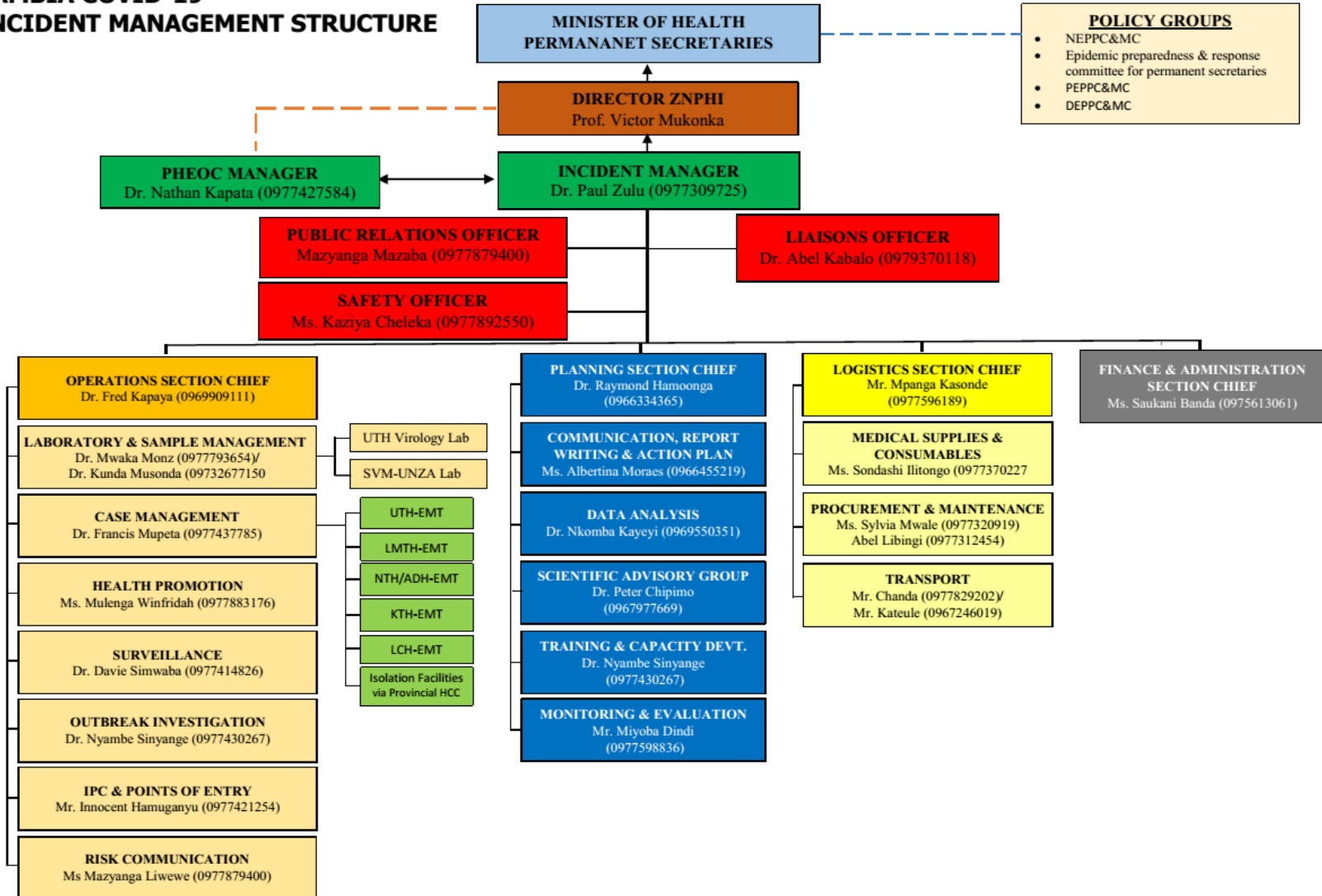
Total Cases	Daily Total			Cumulative since outbreak declared		
Suspected cases	33					
Confirmed cases	2			76		
Recovered	2			37		
Diagnostics and Laboratory Testing						
Samples received**	420			4665		
Samples with results processed	205			4245		
COVID-19 positive	2			76		
COVID-19 negative	203			4169		
Samples with results pending	420			-		
Statistics By Health Facility	Kabwe MNC	Levy	Masaiti	Courtyard	Daily Total	Cumulative since outbreak declared
Admissions/Discharges						
Confirmed Case Admissions	0	0	2	0	2	76
Currently Admitted	1	22	4	9	36	-
Recoveries	0	2	0	0	2	37
Transferred in	0	0	0	0	0	7
Transferred out	0	0	0	0	0	7
Deaths						
Deaths among suspected cases	0	0	0	0	0	0
Deaths among lab confirmed cases	0	0	0	0	0	3

*Reported figures may vary due to continual data cleaning and verification as part of quality assurance

**Includes samples for re-test of confirmed positive cases

ANNEX 2: NATIONAL LEVEL INCIDENT MANAGEMENT SYSTEM FOR THE COVID-19 PREPAREDNESS RESPONSE

ZAMBIA COVID-19 INCIDENT MANAGEMENT STRUCTURE



ANNEX 3: CORONAVIRUS DISEASE 2019 (COVID-19) CASE DEFINITIONS

Case Definitions

1. Suspect case:

A. Patient with acute respiratory infection (fever and at least one sign/symptom of respiratory disease e.g. cough, shortness of breath), AND with no other aetiology that fully explains the clinical presentation AND a history of travel to or residence in a country/area or territory reporting local transmission of COVID-19 during the 14 days prior to symptom onset,

OR

B. Patient with any acute respiratory illness AND having been in contact with a confirmed or probable COVID-19 case in the last 14 days prior to symptom onset,

OR

C. Patient with severe acute respiratory infection (fever and at least one sign/symptom of respiratory disease e.g. cough, shortness of breath), AND requiring hospitalization AND with no other aetiology that fully explains the clinical presentation

2. Probable case: A suspect case for whom testing for COVID-19 is inconclusive or is tested positive using a pan-coronavirus assay and without laboratory evidence of other respiratory pathogens.

3. Confirmed case: A person with laboratory confirmation of COVID-19 infection, irrespective of clinical signs and symptoms.

4. Person Under Investigation: a suspected case, irrespective of admission status, with either history of travel to an area with local transmission or worked in/attended a health care facility treating COVID-19 infections or admission to a facility for severe pneumonia of unknown aetiology

5. Contact: a person who experienced any one of the following exposures during the 2 days before and the 14 days after the onset of symptoms of a probable or confirmed case: a. Face-to-face contact with a probable or confirmed case within 1 meter and for more than 15 minutes; b. Direct physical contact with a probable or confirmed case; c. Direct care for a patient with probable or confirmed COVID-19 disease without using proper personal protective equipment; OR d. Other situations as indicated by local risk assessments.

ANNEX 4: LIST OF DESIGNATED ISOLATION FACILITIES FOR THE COVID-19 OUTBREAK RESPONSE

PROVINCE	DISTRICT	ISOLATION FACILITY
Eastern	Chipata	Walera HP and Chipata District Hospital
	Chadiza	Sadzu RHC and Chilenga HP
	Lundazi	Lundazi New Hospital Male Ward
	Mambwe	Agriculture Field Training Centre and ADRA shade in Nsefu
	Petauke	Zuze Health Post
	Katete	Katete Livestock Market
	Nyimba	Chininkhu Health Post
	Sinda	Ukasimbe Health Post and Chinzule HP
	Vubwi	Chigwe Health Post
	Kasenengwa	Kanzutu Health Post
	Lumezi	Lumezi Hospital, Mwasemphangwe Zonal and Mwanya RHC
	Chasefu	Kanyanga Mission Hospital
	Chipangali	Mkanda RHC and Chinunda RHC

Southern	Lusangazi	Ukwimi Trades
	Livingstone	Mosi Oa Tunya Health centre
	Zimba	Zimba Basic school
	Siavonga	Kabbila Health Post
	Pemba	Pemba Main Clinic
	Kalomo	Mawaya Clinic
	Monze	Mulumbwa Health Post
	Mazabuka	Research clinic
	Chikankata	Nansenga Rural Health centre
	Namwala	Nchole Health Post
	Choma	Njase Clinic
	Gweembe	Munyumbwe HAHC
	Kazungula	Kazungula hospital admin block
Sinazongwe	Sinazongwe rural health centre	
Lusaka	Chilanga	Tubalange Mini Hospital, Mount Makulu Health Post
	Chirundu	Lumbembe Clinic
	Kafue	Shikoswe Clinic
	Luangwa	Kavalamanja RHC, Chitpoe RHC, Kasinsa RHC, Mandombe RHC

	Lusaka	Levy Mwanawasa, UTH, Tubalange Mini Hospital, Chawama SD, Matero SD, Chilenje SD, Kanyama SD, Chipata SD, Victoria Hospital, Bauleni
	Rufunsa	Rufunsa RHC, Chinyunyu RHC
Muchinga	Isoka	Lualizi and Kafwimbi RHC
	Lavushimanda	Red Rhino school, Muwele Market .
	Nakonde	Nakonde Hospital and Nakonde Urban Clinic.
	Chama	FTC
	Shiwang'andu	Lwanya RHC
	Mpika	Chibansa RHC
	Kanchibiya	Kopa Primary school ,LuchembeKanchibiya resettlement scheme,Chalabesa RHC.

	Chinsali	Nambuluma RHC
	Mafinga	Mulekatembo
Western	Senanga	Litambya RHC
	Shangombo	Shangombo Secondary School
		Shangombo RHC
	Kaoma	Kaoma Trades
		Kaoma Youth Resource Centre
	Luampa	Kahumbu Primary School
	Lukulu	Lukulu Old Hospital
	Mitete	Lukulu Old Hospital
	Kalabo	Wenela RHC
	Nalolo	Muoyo RHC
	Sioma	Old Nangwesh Refugee Camp
	Mulobezi	Mulobezi HAHC
Mwandi	Situlu Health Post	

	Sesheke	Mulimambango
	Sikongo	Sikongo RHC
	Limulunga	Nan'oko Health Post
	Mongu	Mongu D Hospital, Mweeke HP
	Nkeyema	Nkeyema Zonal Health Centre
Central	Chitambo	Muchinka RHC
	Mkushi	Kasalamkanga RHC
	Serenje	Serenje Boma School
	Iuano	Old Mkushi Health Centre
	Kapiri	Tazara dry port
	Kabwe	Old Mukobeko clinic
	Chibombo	Twalumba RHC
	Chisamba	Malombe RHC
	Shibuyunji	Sichobo Rural Health Centre
	Mumbwa	Mumbwa Urban Clinic

	Itezhi tezhi	Itezhi tezhi Basic School/Uphill Scholl and and Itezhi Tezhi Boarding School
	Ngabwe	Iwonde primary school
Copperbelt	Chililabombwe	Council Hall
	Chingola	Kalilo Health Centre
	Kalulushi	Kalulushi Urban Health Centre
	Kitwe	Garnerton Clinic
	Luanshya	Chibolya Clinic
	Lufwanyama	Shimukunami Rural Health Centre
	Masaiti	Masaiti District Hospital
	Mpongwe	Bwembelelo Health Post
	Mufulira	Mutundu RHC
	Ndola	Itawa clinic
	Mushidamo	Kichikwe RHC

North-western	Solwezi	SGH/Solwezi College of Nursing
	Kalumbila	Nkulumazhiba Health Facility
	Mwinilunga	Farmers Training College
	Ikelenge	Sachibondu Mission RHC
	Ikelenge	Mukangala RHC (Secondary site)
	Kasempa	Mukinge Mission
	Mufumbwe	Mufumbwe Day Secondary Sch
	Manyinga	Loloma Mission Hospital
	Kabompo	Government Guest House
	Zambezi	Chilenga Health Facility
	Chavuma	Chavuma District Hospital
Northern	Chilubi	Chaba RHC Chilubi RHC
	Kaputa	Kaputa RHC Kalaba RHC Kapepula HP

	Kasama	Lukupa Rural Centre
	Lunte	Chitoshi RHC Mukupa Koama RHC Mulenga Mapesa HP
	Lupososhi	Chungu RHC Nsombo RHC
	Luwingu	Ipusikilo RHC
	Mbala	Chulungoma Urban Clinic Kaluluzi Health Post
	Mporokoso	Township Clinic Chiwala RHC
	Mpulungu	Mpulungu Urban Clinic
	Mungwi	Mungwi Baptist HC, Kayambi RHC
	Nsama	NsumbuRHC
	Senga	Nsumbu RHC, Mwiluzi HP, Sumbi HP

