### Third Wave of COVID19: Prevention, Preparedness and Response



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#### Introduction

#### Daily new confirmed COVID-19 cases, Apr 29, 2021

Shown is the rolling 7-day average. The number of confirmed cases is lower than the number of actual cases; the main reason for that is limited testing.







### Introduction

- 30 April 2021, there have been 150,110,310 confirmed cases of COVID-19, including 3,158,792 deaths, reported to WHO.
- As of 29 April 2021, a total of 1,011,457,859 vaccine doses have been administered
- There are four variants of concern that spread in the world. The first is 1.1.7 assemblage (UK), second is B.1.351 (South Africa), third is P.1 (Brazilian) and the fourth one is 1.1.7 cluster with E484K (new UK).
- The new variant, called B.1.617, was initially detected in India with two mutations – the E484Q and L452R.Apr 19, 2021
- COVID19 vaccine has been effective in prevention of the disease, reducing severity of the disease and preventing death



### Afghanistan COVID19 as of 29 April 21

#### Shown is the rolling 7-day average. The number of confirmed cases is lower than the number of actual cases; the main reason for that is limited testing. 700 600 500 400 300 200 Afghanistan 100 Mar 1, 2020 Apr 30, 2020 Aug 8, 2020 Nov 16, 2020 Feb 24, 2021 Apr 29, 2021

Daily new confirmed COVID-19 cases

Our World in Data



Source: Johns Hopkins University CSSE COVID-19 Data

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### Afghanistan, Pakistan, Iran & India

#### Daily new confirmed COVID-19 cases

Shown is the rolling 7-day average. The number of confirmed cases is lower than the number of actual cases; the main reason for that is limited testing.



Source: Johns Hopkins University CSSE COVID-19 Data

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Our World in Data



### Why this surge?

- People dropped their guards
- The government was easing restrictions
- Religious festivities, political rallies, public transport
- New variants likely to be a factor
- Health system and lack of preparedness



### Why India: April 2021 in India



## What does it mean for Afghanistan?

- Spread of the disease to Afghanistan (MoPH data shows Nangarhar, Kandahar, and Kabul has the highest # of new cases (border with Pakistan)
- Increased COVID19 related morbidity and mortality
- Panic and fear
- Resources deviation from CD, NCD and elective surgeries



## Prevention, Preparedness and Response

• Review of the implementation status of the previously made recommendations on 6 Dec 2020 (for ease of reference added at the end of this presentation)

#### **Prevention:**

- Masks (Presidential decree to make it mandatory in government and public buildings), social distancing is equally important but may not be practical in Afghanistan
- Understanding Knowledge, Attitude and Perception/Practice (KAP) of people about COVID19, to help designing communication content and strategy



## Prevention, Preparedness and Response

 Acceleration of COVID19 vaccination among priority group including teachers, public services providers, police and military personnel, prisoners and prison staff

#### **Preparedness:**

- Ensure adequate supply of oxygen (production, storage, distribution) and its availability
- Ensure essential medicine availability in all treatment centers
- Testing capacity availability and accessibility
- Mass awareness about testing



### Preparedness....cont.

- Sufficient beds, including arrangements with hotels, dormitories etc in case of increased caseload
- Engagement of private sector in prevention, preparedness and response
- Limiting larger gatherings in Eid (in particular indoors), closing wedding halls, and restriction on political rallies etc
- Port of entry control, including PCR testing/vaccination card, possible isolation and quarantine
- Implementation of the MoPH and partners plan of action



#### Response

- Preposition of required supplies in health facilities
- HR and financial resources allocation
- Implementation of the MoPH and its partners' plan

 Implementation of ERADA's 6<sup>th</sup> Dec 2020 recommendations to ensure across sectors response



### ERADA's Recommendations of 6 Dec 2020



### Lessons Learned from the First Wave of COVID19 in Afghanistan

- Surveillance systems were active in very limited settings, it is important to conduct surveillance at different levels of the health care system, including private sector and community
- Enhance surveillance systems at primary healthcare level. The new MoPH COVID-19 policy, recommends a wholesystem approach, from the health post to tertiary care in COVID-19 response. This policy intervention should be accompanied by introducing surveillance systems at all levels



## Lessons Learned from the First Wave of COVID19 in Afghanistan

- To ensure transparency and accountability, the system should apply business management tools at central and provincial levels to regularly update the public, partners, and media on expenditure, supplies and the use of resources during pandemic or health emergencies
- Intergovernmental and multi-sectoral collaboration & mechanism should be in placed well in advance
- Anti-corruption measures should be in placed to ensure transparency and accountability during the fight against health emergency. The system should identify risk areas and apply risk mitigation measures to avoid the misuse of resources



### Lessons Learned from the First Wave of COVID19 in Afghanistan

- During the pandemic, the system could not apply efficient contact tracing in residential areas and among high-risk populations. It is highly recommended to enhance capacity to apply surveillance systems in residential areas using existing resources, like CHWs or community volunteers in addition to the Risk Communication
- The system needs to use innovative technology like cell phones, and generate community friendly applications for surveillance purposes



#### Governance and coordination

- Establishment of a single well-equipped Command and Control Center, e.g. Jalsa-e- 7:30?, inclusive of all relevant sectors
- Collaboration mechanism with internal and external stakeholders should be in placed and each ministry and governmental authority fully understand and own their roles and responsibilities
- Establishment of a single hotline in larger cities with central data on bed capacity and resources availability e.g. equipment
- Professional advice (trained MD/Nurses) to counsel and advise on initial assessment, diversion and direction of patients in need

#### Overall Strategy and Response Plan

*After reviewing the current COVID19 response plan, it can benefit from:* 

- A description of the "strategy", as this will have implication for human and financial resources (overall lockdown, hot spot identification, tracing, isolation and quarantine; or public education and no enforced lockdown)
- Prioritization of activities and geographic locations based on selected criteria
- Description of "where" and "when"
- Costing of each activity and geographical locations



#### Overall Strategy & Response Plan...

- Risk management strategy and plan
- Supply Chain Management Plan from Competitive Procurement, Transport, Storage, Distribution and Utilization
- More details on quality assurance
- Contingencies and room for adjustment: clarity of agile and adaptive plan is to address changing trend of the outbreak



#### COVID19 Testing

**Strengthening testing capacity**. The most important priorities:

- Understanding current testing capacity. An open platform PCR machine tests a maximum of 1000 samples in 24 hours. How many lab technicians are trained to conduct RT-PCR? In settings more advanced than Afghanistan the total number of trained people who can do RT-PCR is limited. The contamination rate even among those trained is high.
- RT-PCR is gold standard, but its expensive, trained personnel is scarce, and it takes time from sample to result. We must think about other test options too (Rapid Antigen test)
- Sample taking and sample management is another very important priority.



#### COVID19 Testing...cont.

- Improving lab processes enhances testing capacity. This will require strengthening management capacity of lab
- Only focusing on lab capacity is not enough. The spread of infection is fast, and the number of cases can easily overwhelm lab capacity
- Introducing Rapid Test: Rapid antigen test is a reliable way to reduce the load on lab and provide. If used within 7 days of onset of symptoms the sensitivity could be around 85%. Specificity of these tests is high. The two good Rapid Antigen tests are:

Abbot PanBio Rapid Antigen Essay

Bionax Now COVID 19 Antigen CardEssay



### Vaccines: Successful 3<sup>rd</sup> Phase Trial

Manufacturer	Туре	Efficac Y	Dosage	Cost (USD)	Storage in Celsius		Preven t infecti	Side effects or sever
					30 days	6months	ons	diseases
Pfizer & BioNTech	RNA	>90%	Two; 3-4 weeks apart	20	- 20	- 70	?	minor
Moderna	RNA	>90%	Two; 3-4 weeks apart	20	- 20	-70	?	minor
Oxford – AstraZeneca	DNA	62%	Two; [1+1] 4 weeks apart	3-5	2-8	Fridge temp	Yes	minor
		>90%	Two [0.5-1] 4 weeks apart	3-5	2-8	Fridge temp	Yes	minor



#### Vaccines: COVAX

- Eligible countries are expected to submit their vaccine request (by 7 Dec 2020) to GAVI for 20% under COVAX-AMC mechanism and additional 5% through cost-sharing
- Countries can apply for TA to support preparation of the application
- Countries are expected to conduct Vaccine Implementation Readiness Assessment (WHO developed tool and support)
- For identified, countries can apply for support to Cold Chain Equipment (CCE), It is imported to act in this as early as possible. The applications can be submitted through Q1 2021



#### Vaccines

- The Russians and Chinese had a limited approval for the similar Viral Vector Vaccines few months ago, if the Government reach out to Russians and Chinese, they might be able to secure some additional doses. China is already testing similar VVV vaccines in UAE
- Preventive measures should be in placed until 80% vaccine coverage is achieved
- Social distancing, mask (homemade okay too), hand washing, contact tracing, isolation if exposed, quarantine if sick



#### Vaccines: Prioritization

- Review and adjust generic WHO SAGE framework for local context (1. see footnote)
- Populations with significantly elevated risk of severe disease or death (e.g. elderly, people with comorbidity); or infection (e.g. health workers, social groups unable to physically distance such as refugee camps military personnel, detention facilities etc
- Economically critical sector, government leaders
- Hard to reach people, people living in poverty, essential workers outside health sector



- Prioritize simple hospital interventions to save the most lives
- Align global-development-partner-supported commodity procurement with country realities to enable delivery of the highest value interventions
- Carry out pragmatic research to understand what works in Afghanistan in support of a learning healthcare system





#### **Resource Intensity**

**Patient Numbers** 



- Assessment, triage, stabilization and referral by lower-level health facilities
- Oxygen therapy and advanced respiratory care
- Therapeutic and supportive medical care (Dexamethasone, Anticoagulants)
- Personal protective equipment (PPE) to protect frontline staff and prevent infections acquired in hospital



- Strengthening home care specifically (Community COVID-19 management protocols)
  - infection prevention
  - patient monitoring
  - danger signs and O2 supplementation
- 24/7 resource center (in one of the referral or university hospitals) to provide remote advice and guidance in complex cases
- Promotion of tele-education (Afghans abroad help)



## Supply Chain Management (including PPE, Medicines and Oxygen)

- Development of Supply Chain Management Plan from procurement to utilization. Training of all health managers and health administrators in Supply Chain Management
- Identification of risks and developing a risk mitigation plan
- Stock management system should be digitalized and linked to all provinces and health facilities
- Hospitals should be equipped with essential PPEs and infection prevention supplies, and its use should be regularly monitored via a central digital inventory system



## Supply Chain Management (including PPE, Medicines and Oxygen)

- 10-15% severe cases that warrant hospitalization, may require oxygen
- All hospitals should be equipped with central system for supply of oxygen. In case that is not possible in short run, a buffer system for storing adequate oxygen in the hospitals should be in placed
- An entire commercial oxygen production plant might run a price tag of USD 200k to 500k. Government (or in partnership with private sector) should establish five plants in five major cities within 2 months



#### Impact Mitigations & Social Protection

- Remove any import/sale tax from major heating sources: e.g. oil, coal and gas and importers of heaters and equipment
- Identify major oil and gas vendors and establish a PPP to strictly monitor the prices so the discount can reach the consumers
- Provide subsidized fuel/gas to those who cannot afford
- The idea is if a COVID-19 positive or suspect is to be isolated or quarantined in the house, the household has sufficient resources to provide heating in an additional room! As 80% patients will remain in homes.



#### Impact Mitigations & Social Protection

- Identify those areas that are at high risk for food insecurity, hunger and starvation
- Create emergency strategic resources/stock in those areas before the first snow
- Provide subsidies to those vendors/traders who want to supply hard to reach areas
- Involve provincial and district government (including law enforcement) in all steps of the planning, because the central government won't be able to reach there on time



# Discussion, questions and comments!

