



**USAID PREDICT**

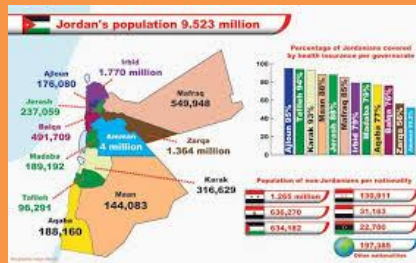
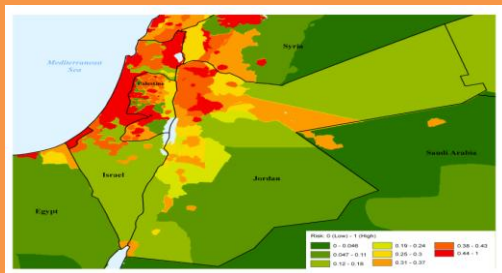
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**BACKGROUND**

The PREDICT 2 Jordan project, part of USAID’s Emerging Pandemic Threats program (EPT - <https://www.usaid.gov/ept2>), is developing a global early warning system to detect, track, and predict the emergence of new zoonotic pathogens from wildlife that could pose a threat to human health.

**THE AMAZING JORDAN**

- Around 13000 BC people began to settle in Jordan.
- Jordan is located in the center of unstable Middle East.
- In last 20 years, population grew more than 70%.
- Refugees constitute third of Jordan population.
- There are more than 100 nationalities in Jordan.



**MERS-COV IN JORDAN**

Van Doremalen et al. High Prevalence of Middle East Respiratory Coronavirus in Young Dromedary Camels in Jordan. *Vector Borne Zoonotic Dis.* 2017 Feb;17(2):155-159.

Prevalence of the Middle East respiratory syndrome coronavirus (MERS-CoV) was determined in 45 dromedary camels from two geographically separated herds in Jordan. Virus shedding was only detected in swabs obtained from the respiratory tract and primarily observed in camels younger than 3 years. MERS-CoV seroprevalence increased with age of camels. Bovine and sheep sera were seronegative. Phylogenetic analysis of partial S2 clustered the Jordanian MERS-CoV strains with contemporary MERS-CoV strains associated with nosocomial outbreaks.

**FOLLOW UP STUDIES**

Table 1a	Paramyxovirus		Influenza virus		Filovirus	
	Oral	Rectal	Oral	Rectal	Oral	Rectal
Wadi Elsir 1-100	0	0	4	3	0	0
Ajluin 1-21	0	0	2	0	0	0
222-422	3	9	0	5	1	1
Total	3	9	6	8	1	1

Table 1b	Coronavirus (Quan protocol)		Coronavirus (Watanabe protocol) Bat coronavirus		Coronavirus (Watanabe protocol) Others coronavirus	
	Oral	Rectal	Oral	Rectal	Oral	Rectal
Wadi Elsir 1-100	1	36	8	36		
Ajluin 1-21	15	20	6	13		
222-422	85	108	9	24	6	21
total	101	164	23	73	6	21

Table 1a: Summary of laboratory results of the 422 oral and rectal bat samples examined for different virus families; 1b summary of laboratory results of the 422 oral and rectal bat samples examined for different virus families.

**ONE HEALTH IMPLEMENTATION IN JORDAN: MERS-COV EXPERIENCE IN SOUTHERN JORDAN**

**TRAINING**

- Govt. personnel
- Physicians
- Veterinarians
- Resource managers
- Laboratory technicians
- Students

**CAPACITY BUILDING**

- Low cost methods to detect viral pathogens

**SURVEILLANCE**

- Human
- Livestock
- Wildlife

