EIOS in Iraq

Presenter:

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Director of Surveillance Section/Communicable Diseases Control Center

Public Health Directorate

Ministry of Health

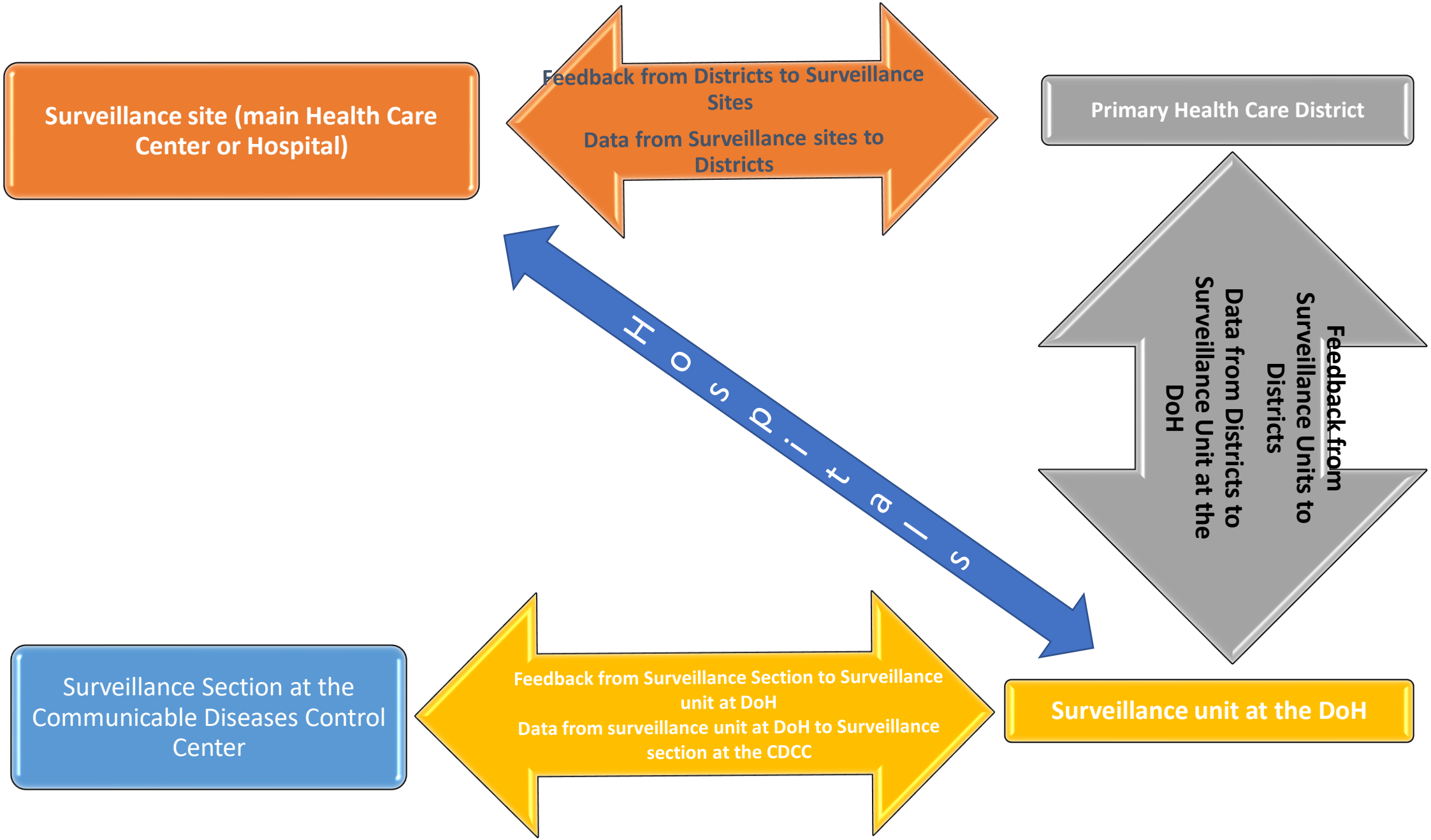
Outline

- EIOS establishment and integration
- EIOS boards
- EIOS opportunities for development
- EIOS activities
- EIOS signals summary
- EIOS examples

Current Surveillance System in Iraq, 2022

Current Surveillance in Iraq

- EpiInfo
  - Three templates
    - Immediate notification and Case-based (40 disease)
    - Weekly (Aggregated (14 syndrome and/ or disease))
    - Event-based (EpiInfo, EIOS) (4 events)
- Province level, district, and hospitals (few)
- Passive, AFP and VPDs (passive and active, Paper and electronic)
- Compiling and cleaning data occurs at the central level
- Output (daily reports, weekly, monthly, and annual reports)


Surveillance site (main Health Care Center or Hospital)
Feedback from Districts to Surveillance Sites
Data from Surveillance sites to Districts
Primary Health Care District
Hospitals
Feedback from Surveillance Units to Districts
Data from Districts to Surveillance Unit at the DoH
Surveillance Section at the Communicable Diseases Control Center
Feedback from Surveillance Section to Surveillance unit at DoH
Data from surveillance unit at DoH to Surveillance section at the CDCC
Surveillance unit at the DoH

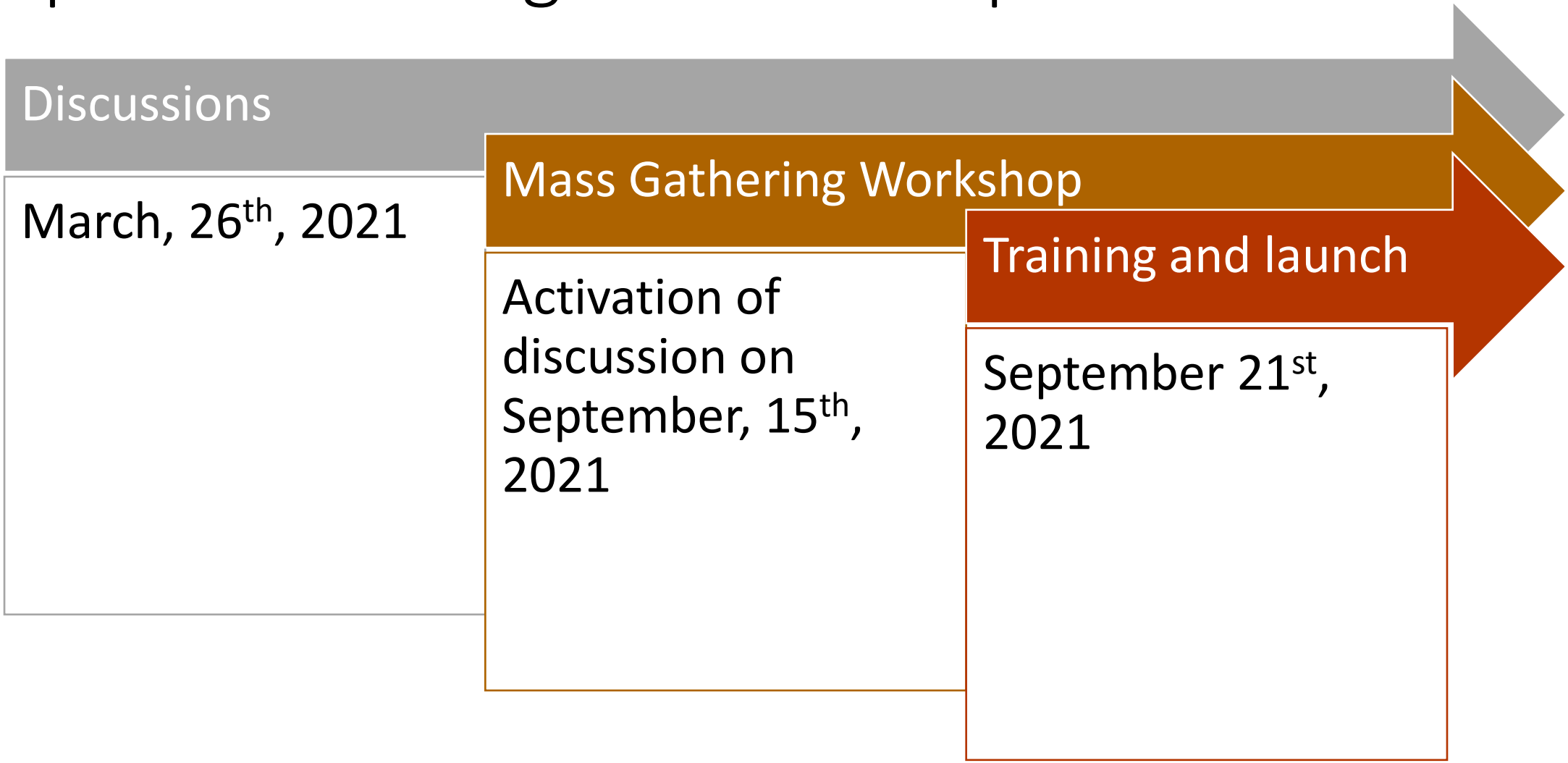
Event-based surveillance

Event	Threshold	Examples
An unexplained or unusual illness or symptom appears (contagious) between people together in a family or community	Clustering (more than two people) within a week	SARS; Middle East respiratory syndrome; a new subtype of influenza; West Nile virus; dengue fever; pneumonic plague; smallpox; Accidental or intentional release of pathogens
Unexplained or unusual deaths that appear to be (contagious) between people together in a family or community	Clustering (more than two people) within a week	SARS; Middle East respiratory syndrome; a new subtype of influenza; West Nile virus; dengue fever; pneumonic plague; smallpox; Accidental or intentional release of pathogens
A case of suspected or death of a patient with symptoms similar to viral hemorrhagic fever	One or more	syndromes of viral hemorrhagic fever (Crimean-Congo fever, Ebola, Lassa, Marburg, Rift Valley fever, yellow fever);
Any sudden or unexpected health problem in animals (wild or domesticated) in same community	Cluster	viral hemorrhagic fever syndromes; Influenza is a new subtype.

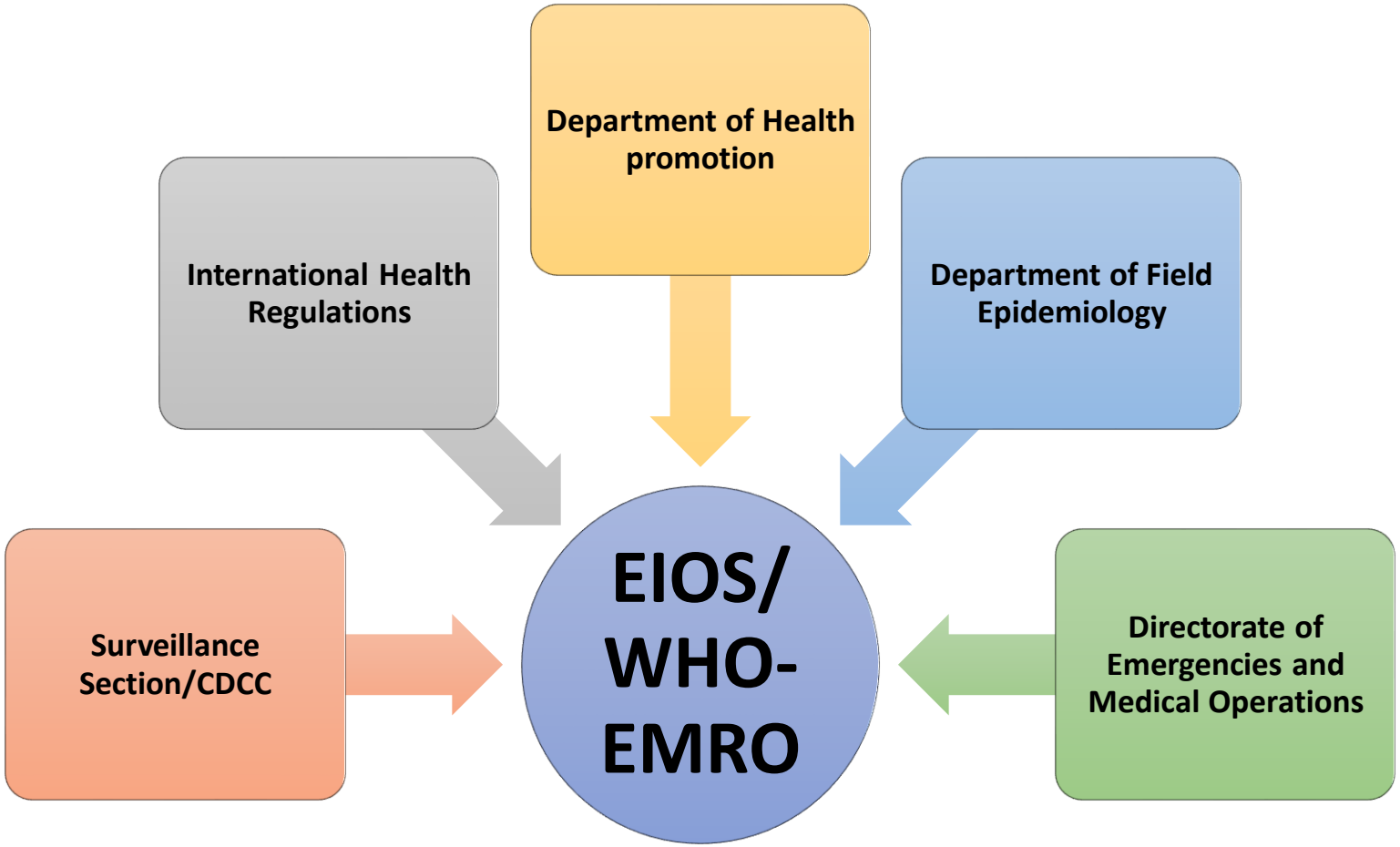
Epidemic Intelligence from Open Sources (EIOS)

A success story during the pandemic

Epidemic Intelligence from Open Sources



EIOS partners



EIOS activities

Activities

2021

2022

Preparatory

April

Two Online meetings

May

One online meeting

Training and Launch

Sept

Three online meetings:
1 - By WHO-EMRO to MoH team
2 -By CDCC to health promotion , surveillance and epidemiology department
3 -By CDCC to operations directorate

October

Online meetings and webinars

1 -Three online meetings with WHO-EMRO
2 -Two webinars on new features of EIOS

Follow - up

December

EIOS Global technical Meeting Online

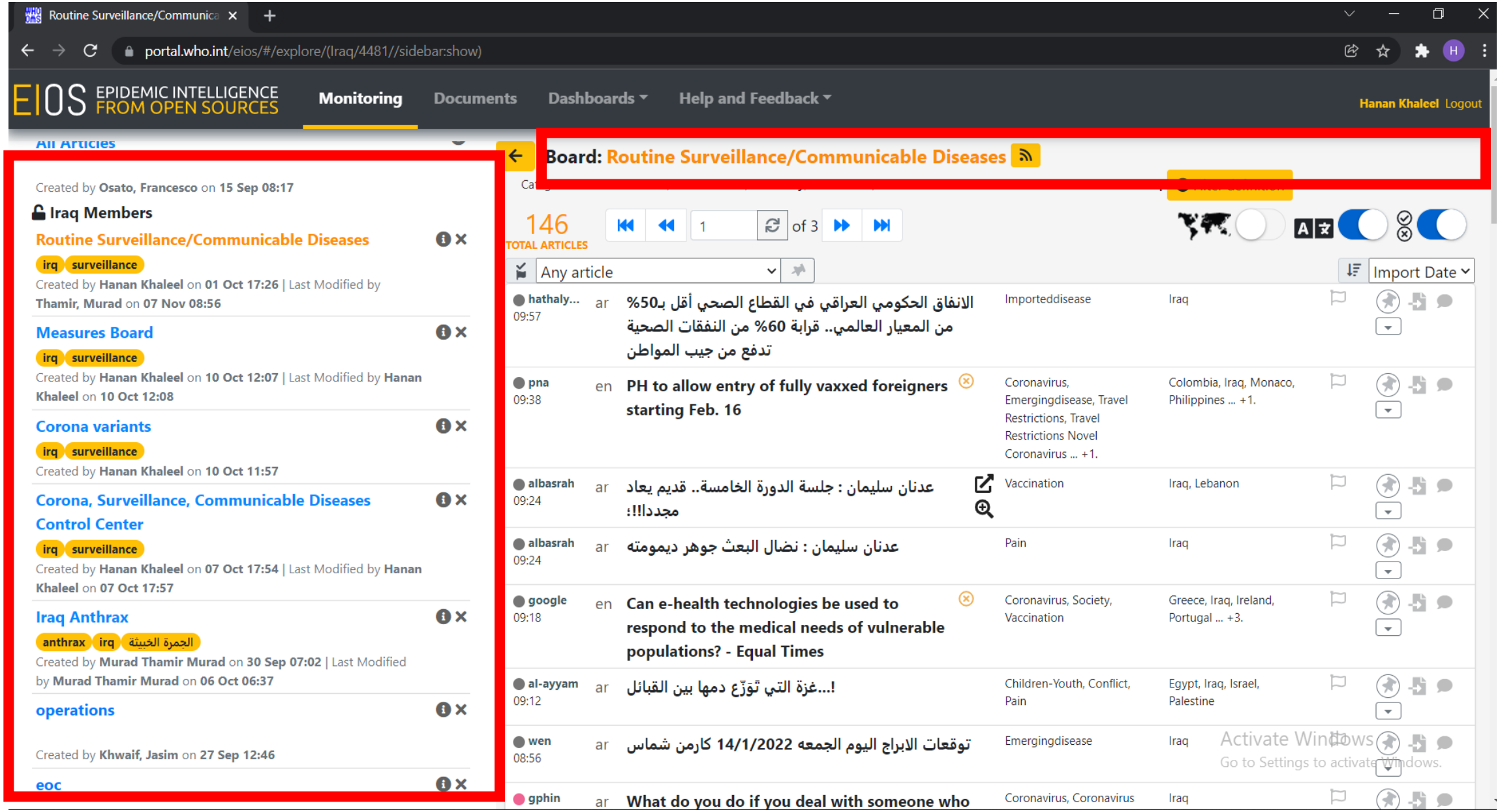
January

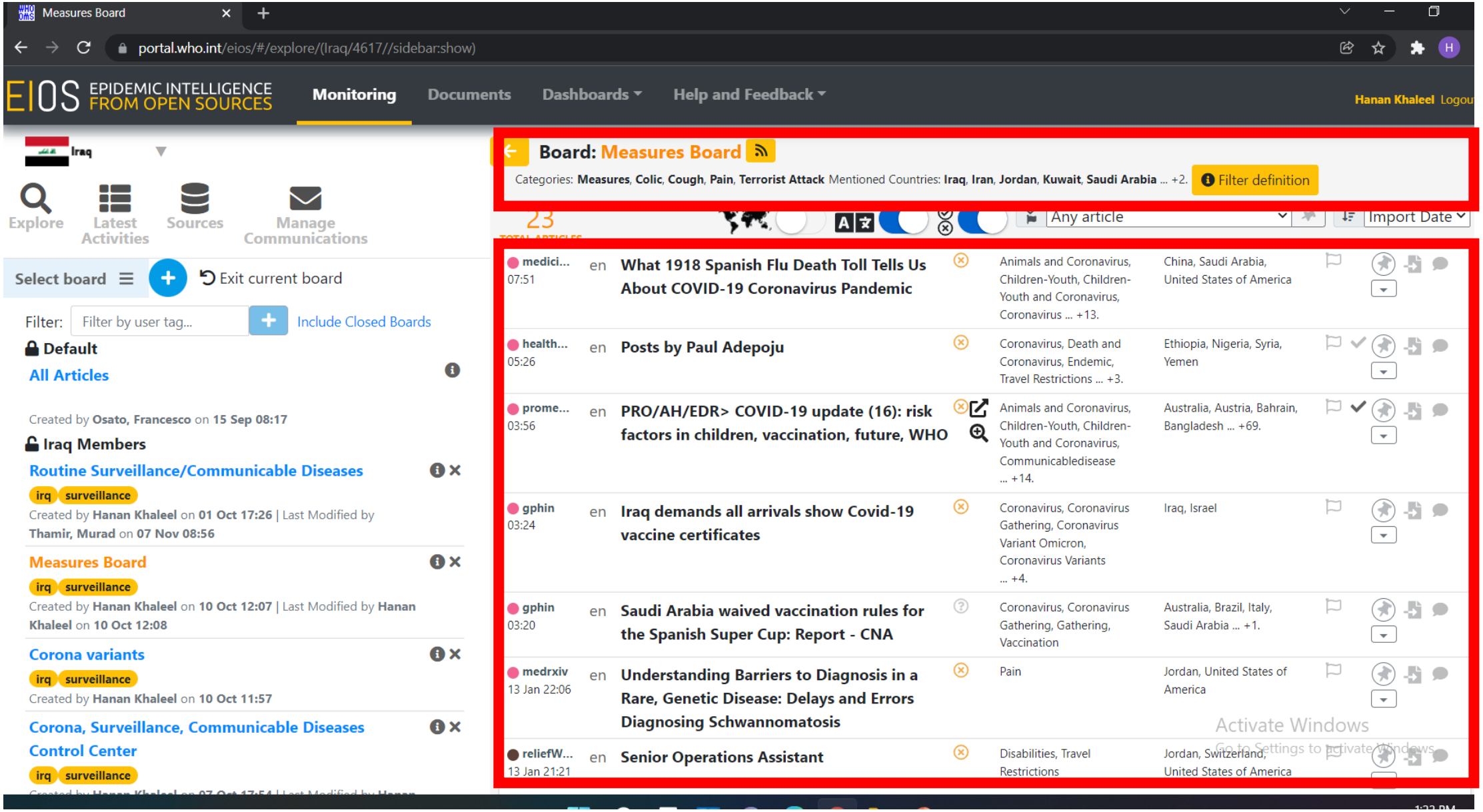
One online meeting with WHO-EMRO

November

EIOS Global technical Meeting

EIOS boards in Iraq


Routine Surveillance/Communica
portal.who.int/eios/#/explore/(Iraq/4481//sidebar:show)
EIOS EPIDEMIC INTELLIGENCE FROM OPEN SOURCES
Monitoring
Documents
Dashboards
Help and Feedback
Hanan Khaleel Logout
All Articles
Created by Osato, Francesco on 15 Sep 08:17
Iraq Members
Routine Surveillance/Communicable Diseases
irq surveillance
Created by Hanan Khaleel on 01 Oct 17:26 | Last Modified by Thamir, Murad on 07 Nov 08:56
Measures Board
irq surveillance
Created by Hanan Khaleel on 10 Oct 12:07 | Last Modified by Hanan Khaleel on 10 Oct 12:08
Corona variants
irq surveillance
Created by Hanan Khaleel on 10 Oct 11:57
Corona, Surveillance, Communicable Diseases Control Center
irq surveillance
Created by Hanan Khaleel on 07 Oct 17:54 | Last Modified by Hanan Khaleel on 07 Oct 17:57
Iraq Anthrax
anthrax irq الجمرة الخبيثة
Created by Murad Thamir Murad on 30 Sep 07:02 | Last Modified by Murad Thamir Murad on 06 Oct 06:37
operations
Created by Khwaif, Jasim on 27 Sep 12:46
eoc
Board: Routine Surveillance/Communicable Diseases
146 TOTAL ARTICLES
1 of 3
Any article
Import Date
hathaly... 09:57 ar الانفاق الحكومي العراقي في القطاع الصحي أقل بـ50% من المعيار العالمي.. قرابة 60% من النفقات الصحية تدفع من جيب المواطن Importeddisease Iraq
pna 09:38 en PH to allow entry of fully vaxxed foreigners starting Feb. 16 Coronavirus, Emergingdisease, Travel Restrictions, Travel Restrictions Novel Coronavirus ... +1. Colombia, Iraq, Monaco, Philippines ... +1.
albasrah 09:24 ar عدنان سليمان : جلسة الدورة الخامسة.. قديم يعاد مجددا!!؛ Vaccination Iraq, Lebanon
albasrah 09:24 ar عدنان سليمان : نضال البعث جوهر ديمومته Pain Iraq
google 09:18 en Can e-health technologies be used to respond to the medical needs of vulnerable populations? - Equal Times Coronavirus, Society, Vaccination Greece, Iraq, Ireland, Portugal ... +3.
al-ayyam 09:12 ar غزة التي تَوزّع دمها بين القبائل...! Children-Youth, Conflict, Pain Egypt, Iraq, Israel, Palestine
wen 08:56 ar توقعات الابراج اليوم الجمعه 14/1/2022 كارمن شماس Emergingdisease Iraq
gphin ar What do you do if you deal with someone who Coronavirus, Coronavirus Iraq
Activate Windows
Go to Settings to activate Windows.


Measures Board
portal.who.int/eios/#/explore/(Iraq/4617//sidebar:show)
EIOS EPIDEMIC INTELLIGENCE FROM OPEN SOURCES
Monitoring
Documents
Dashboards
Help and Feedback
Hanan Khaleel Logou
Iraq
Explore
Latest Activities
Sources
Manage Communications
Select board
Exit current board
Filter:
Filter by user tag...
Include Closed Boards
Default
All Articles
Created by Osato, Francesco on 15 Sep 08:17
Iraq Members
Routine Surveillance/Communicable Diseases
irq surveillance
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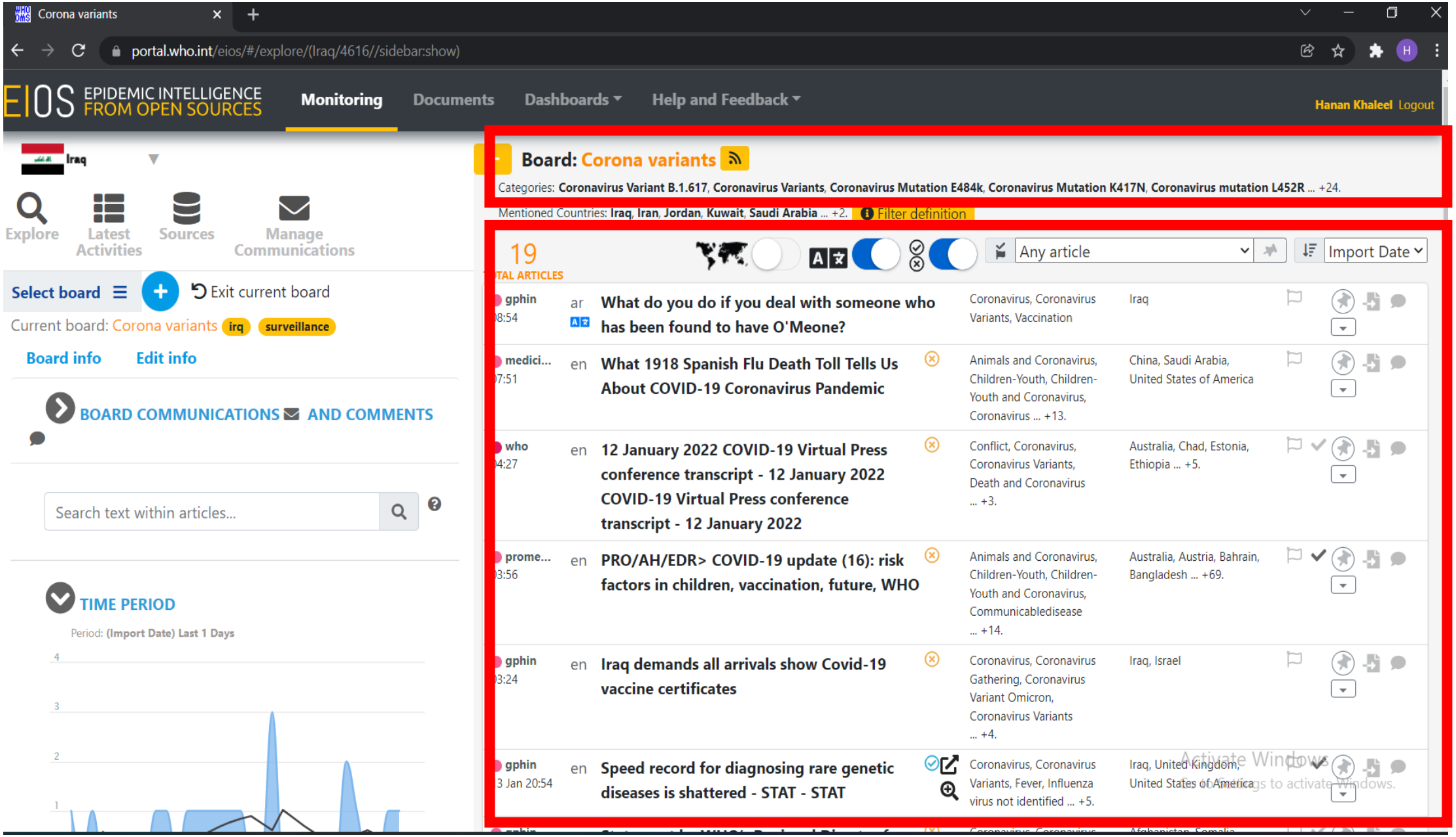
Corona variants
irq surveillance
Created by Hanan Khaleel on 10 Oct 11:57
Corona, Surveillance, Communicable Diseases Control Center
irq surveillance
Board: Measures Board
Categories: Measures, Colic, Cough, Pain, Terrorist Attack Mentioned Countries: Iraq, Iran, Jordan, Kuwait, Saudi Arabia ... +2.
Filter definition
23
TOTAL ARTICLES
Any article
Import Date
medici... 07:51 en What 1918 Spanish Flu Death Toll Tells Us About COVID-19 Coronavirus Pandemic
Animals and Coronavirus, Children-Youth, Children-Youth and Coronavirus, Coronavirus ... +13.
China, Saudi Arabia, United States of America
health... 05:26 en Posts by Paul Adepoju
Coronavirus, Death and Coronavirus, Endemic, Travel Restrictions ... +3.
Ethiopia, Nigeria, Syria, Yemen
prome... 03:56 en PRO/AH/EDR> COVID-19 update (16): risk factors in children, vaccination, future, WHO
Animals and Coronavirus, Children-Youth, Children-Youth and Coronavirus, Communicabledisease ... +14.
Australia, Austria, Bahrain, Bangladesh ... +69.
gphin 03:24 en Iraq demands all arrivals show Covid-19 vaccine certificates
Coronavirus, Coronavirus Gathering, Coronavirus Variant Omicron, Coronavirus Variants ... +4.
Iraq, Israel
gphin 03:20 en Saudi Arabia waived vaccination rules for the Spanish Super Cup: Report - CNA
Coronavirus, Coronavirus Gathering, Gathering, Vaccination
Australia, Brazil, Italy, Saudi Arabia ... +1.
medrxiv 13 Jan 22:06 en Understanding Barriers to Diagnosis in a Rare, Genetic Disease: Delays and Errors Diagnosing Schwannomatosis
Pain
Jordan, United States of America
reliefW... 13 Jan 21:21 en Senior Operations Assistant
Disabilities, Travel Restrictions
Jordan, Switzerland, United States of America
Activate Windows
Go to Settings to activate Windows.


Corona variants
portal.who.int/eios/#/explore/(Iraq/4616//sidebar:show)
EIOS EPIDEMIC INTELLIGENCE FROM OPEN SOURCES
Monitoring
Documents
Dashboards
Help and Feedback
Hanan Khaleel Logout
Iraq
Explore
Latest Activities
Sources
Manage Communications
Select board
Exit current board
Current board: Corona variants irq surveillance
Board info
Edit info
BOARD COMMUNICATIONS AND COMMENTS
Search text within articles...
TIME PERIOD
Period: (Import Date) Last 1 Days
Board: Corona variants
Categories: Coronavirus Variant B.1.617, Coronavirus Variants, Coronavirus Mutation E484k, Coronavirus Mutation K417N, Coronavirus mutation L452R ... +24.
Mentioned Countries: Iraq, Iran, Jordan, Kuwait, Saudi Arabia ... +2.
Filter definition
19
TAL ARTICLES
Any article
Import Date
gphin 8:54
ar
What do you do if you deal with someone who has been found to have O'Meone?
Coronavirus, Coronavirus Variants, Vaccination
Iraq
medici... 7:51
en
What 1918 Spanish Flu Death Toll Tells Us About COVID-19 Coronavirus Pandemic
Animals and Coronavirus, Children-Youth, Children-Youth and Coronavirus, Coronavirus ... +13.
China, Saudi Arabia, United States of America
who 4:27
en
12 January 2022 COVID-19 Virtual Press conference transcript - 12 January 2022 COVID-19 Virtual Press conference transcript - 12 January 2022
Conflict, Coronavirus, Coronavirus Variants, Death and Coronavirus ... +3.
Australia, Chad, Estonia, Ethiopia ... +5.
prome... 3:56
en
PRO/AH/EDR> COVID-19 update (16): risk factors in children, vaccination, future, WHO
Animals and Coronavirus, Children-Youth, Children-Youth and Coronavirus, Communicablediseases ... +14.
Australia, Austria, Bahrain, Bangladesh ... +69.
gphin 3:24
en
Iraq demands all arrivals show Covid-19 vaccine certificates
Coronavirus, Coronavirus Gathering, Coronavirus Variant Omicron, Coronavirus Variants ... +4.
Iraq, Israel
gphin 3 Jan 20:54
en
Speed record for diagnosing rare genetic diseases is shattered - STAT - STAT
Coronavirus, Coronavirus Variants, Fever, Influenza virus not identified ... +5.
Iraq, United Kingdom, United States of America
Activate Windows

Corona, Surveillance, Communica

portal.who.int/eios/#/explore/(Iraq/4599//sidebar:show)

EIOS EPIDEMIC INTELLIGENCE FROM OPEN SOURCES

Monitoring | Documents | Dashboards | Help and Feedback | Hanan Khaleel Logout

Current board: Corona, Surveillance, Communicable Diseases Control Center irq surveillance

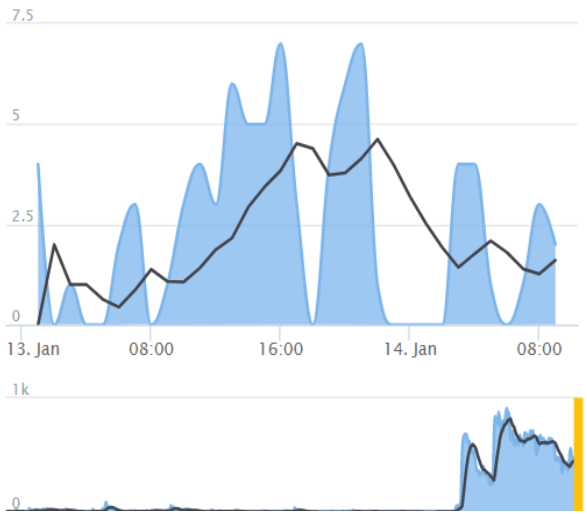
Board info | Edit info

BOARD COMMUNICATIONS 1 AND COMMENTS

Search text within articles...

TIME PERIOD

Period: (Import Date) Last 1 Days



Board: Corona, Surveillance, Communicable Diseases Control Center

Mentioned Countries: **Iraq**, **Iran**, **Jordan**, **Kuwait**, **Saudi Arabia** ... +2. Filter definition

83 TAL ARTICLES | 1 of 2 | Any article | Import Date

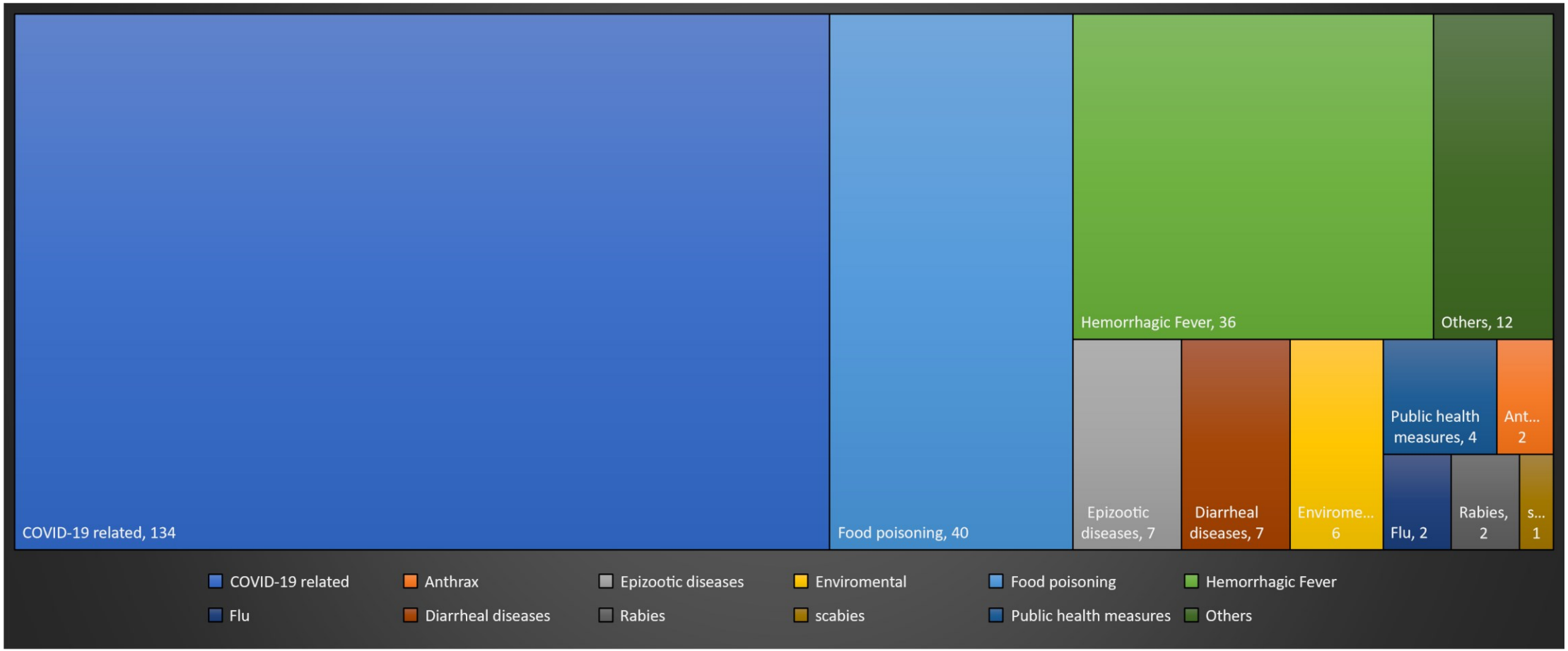
gphin 09:54	ar	Gabes: 81 new CORONA infections recorded	Coronavirus	Saudi Arabia	
gphin 09:34	ar	Jordan scores 3,362 new injuries to Coruna	Coronavirus	Jordan	
gphin 08:59	ar	Saudi Arabia sets new record for number of COV infections	Coronavirus, Vaccination	Kuwait, Qatar, Saudi Arabia	
gphin 08:54	ar	What do you do if you deal with someone who has been found to have O'Meone?	Coronavirus, Coronavirus Variants, Vaccination	Iraq	
cdc-tw... 08:23	en	CECC confirms 68 more COVID-19 cases, including 11 domestic cases and 57 imported cases 2022 - 1 14	Coronavirus, Death and Coronavirus, Epidemic, Unknown disease	Australia, Brazil, Canada, Indonesia ... +7.	
medici... 07:51	en	What 1918 Spanish Flu Death Toll Tells Us About COVID-19 Coronavirus Pandemic	Animals and Coronavirus, Children-Youth, Children-Youth and Coronavirus, Coronavirus ... +13.	China, Saudi Arabia, United States of America	
health... 05:26	en	Posts by Paul Adepoju	Coronavirus, Death and Coronavirus, Endemic, Travel Restrictions ... +3.	Ethiopia, Nigeria, Syria, Yemen	
europe...	en	Latest count of confirmed COVID-19 cases	Coronavirus	Brazil, China, India, Turkey	

Activate Windows
Go to Settings to activate Windows.

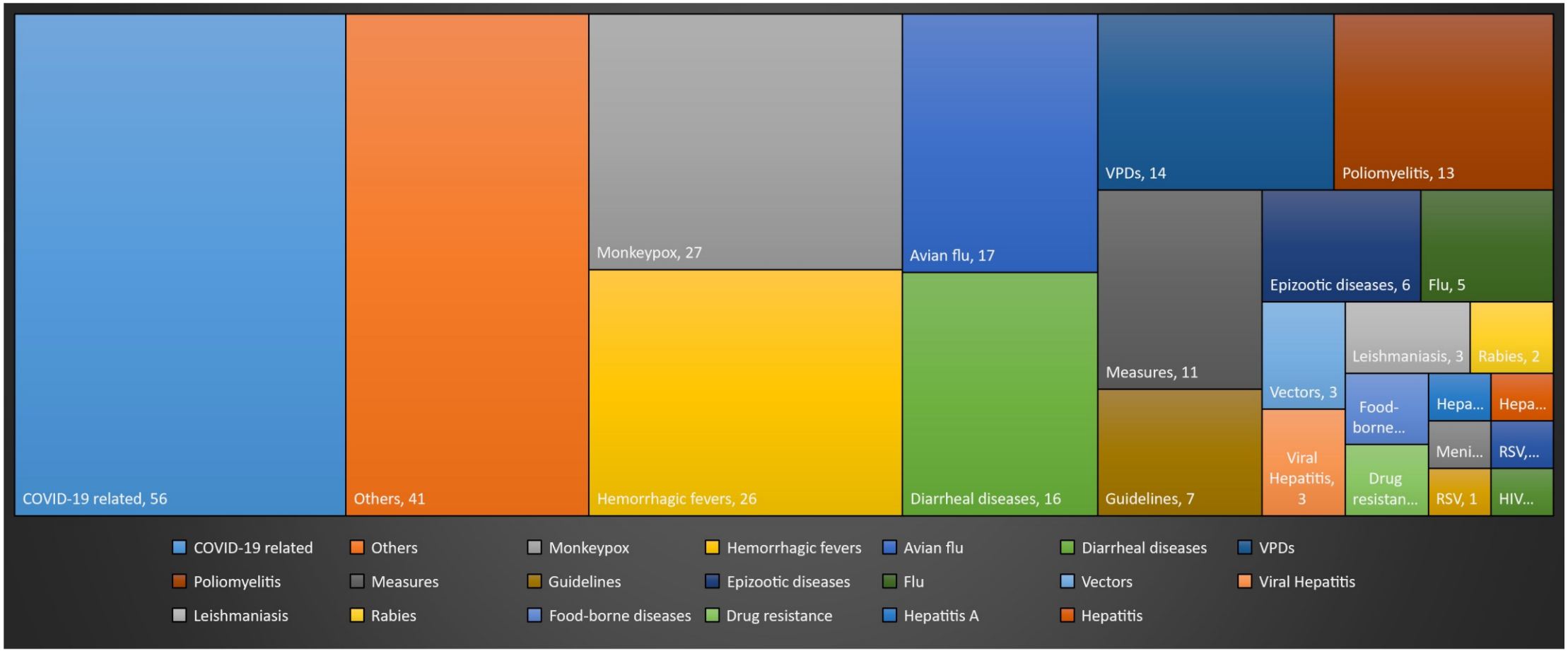
EIOS signal summary

October 2021-November 2022

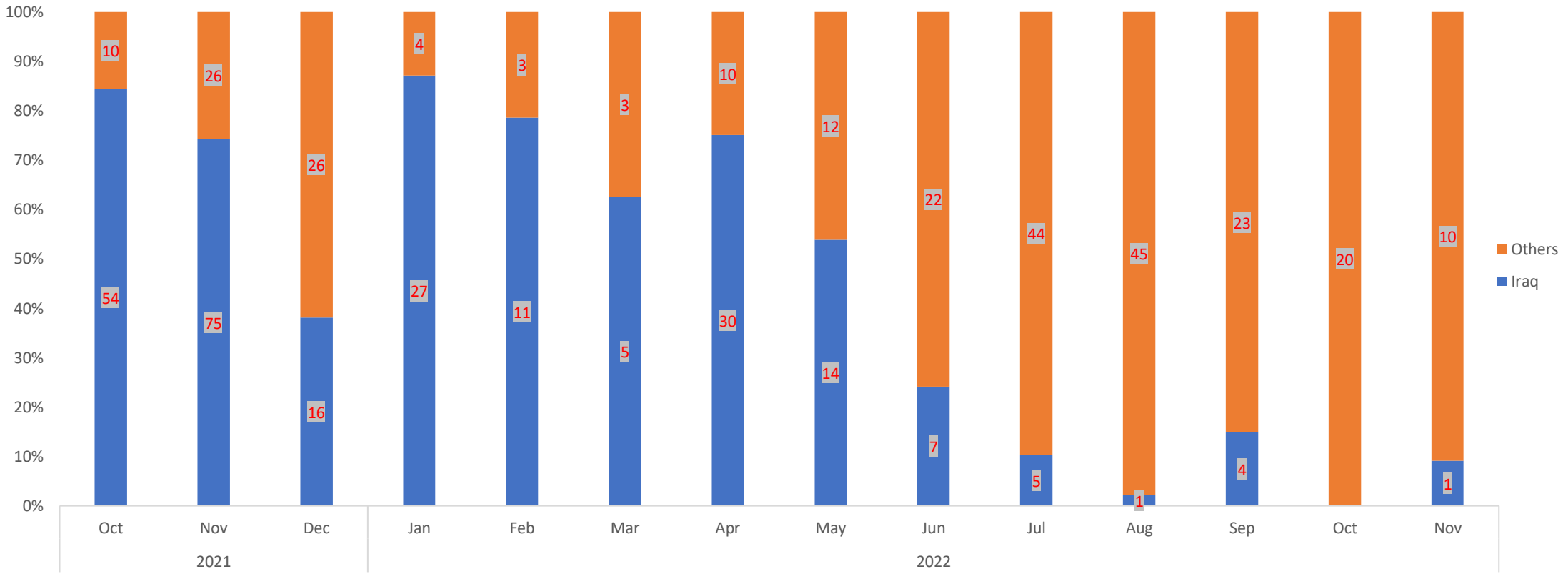
Total signals=516
Iraq's signals=252 (48.8%)



EIOS signals (except Iraq)



Iraq signals timeline



Examples of signals detected through EIOS

- February 7, 2022: Diarrheal disease in Sulaymaniya
  Truth: an increase in alert threshold

- May 13, 2022: A 70 case of Food Poisoning in Rabiaa/Nineveh
  Truth: 27 cases. All are mild
- May 19, 2022: Monkey pox in USA, Europe, Spain
- May 25, 2022: Banning Importation of Monkeys in Thiqar
- May 28, 2022: Vomiting and diarrhea in Sulaymaniya
- June 12, 2022: Vomiting and diarrhea in Sulaymaniya

Examples of signals detected through EIOS

- July 14, 2022: Vomiting and diarrhea in Erbil

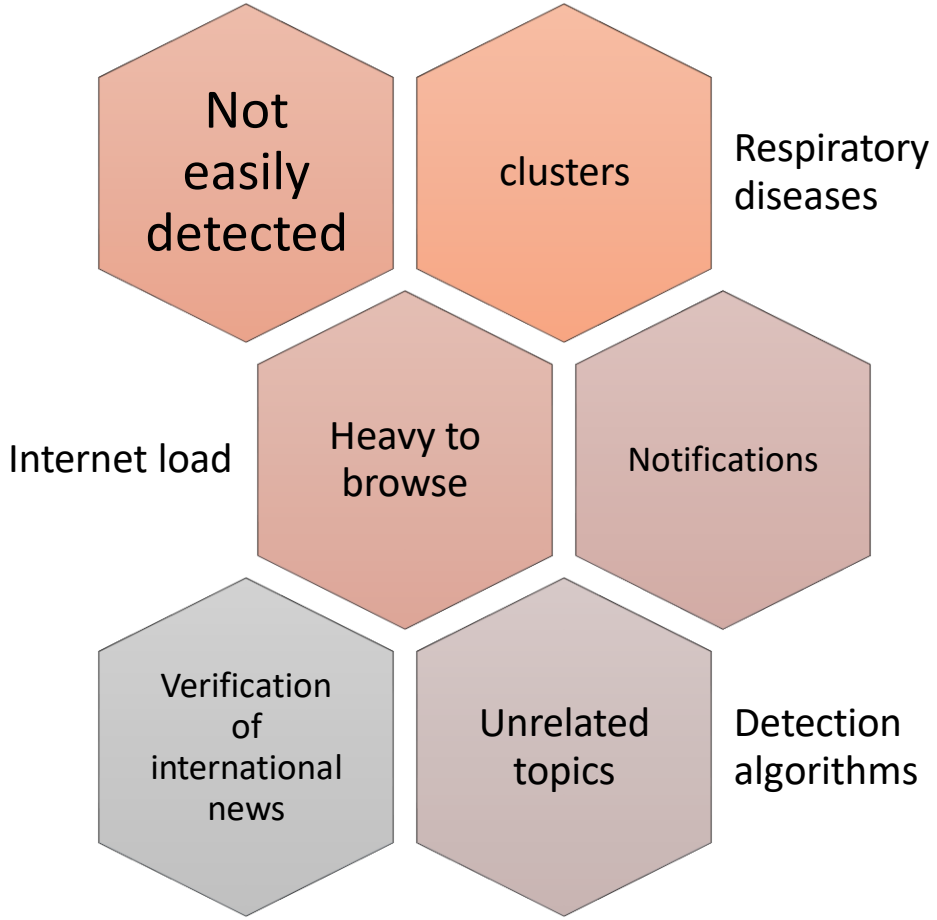
  Truth: True (1000 case)
- July 27, 2022: Food poisoning in Baghdad

  Truth: True (100 case)

Opportunities

Training	• Data summarization and analysis • Data verification flow
Logistics	• Tablets • internet connection
Research	• Using EIOS for epidemiological research • Publishing
Networking	• Symposium with colleagues working on EIOS in other countries

Challenges


Not easily detected
clusters
Respiratory diseases
Internet load
Heavy to browse
Notifications
Verification of international news
Unrelated topics
Detection algorithms

Thank you