



# CALL TO ACTION

PROTECTING THE VULNERABLE AGAINST INFLUENZA

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## Countries in the Middle East Region must act now to increase influenza immunization rates and protect the vulnerable

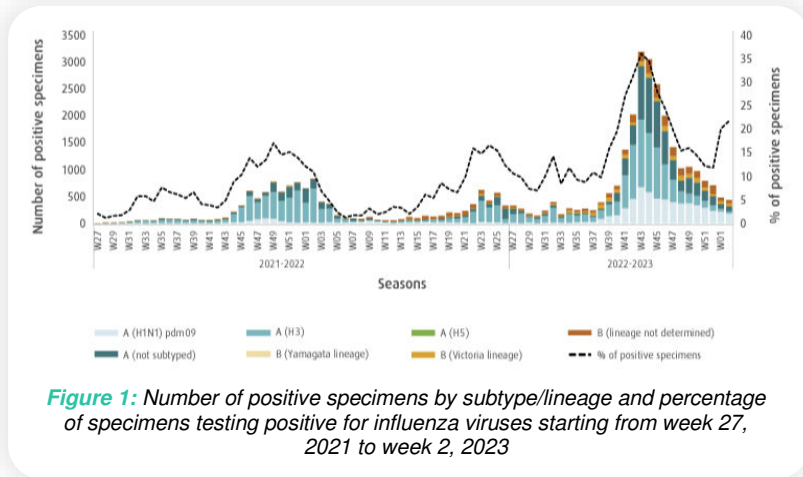
A multidisciplinary group of subject matter experts from the Middle East region met in February 2023 in Dubai to better understand and address the suboptimal influenza immunization rates across the region.

In a participatory workshop hosted by MENA-ISN and Irimi, common key barriers to vaccine uptake were identified leading to recommendations for strategies which may help countries act to effectively increase immunization rates and protect vulnerable populations against the influenza virus.

## OVERVIEW

### Influenza disease is a serious health concerning the MENA region.

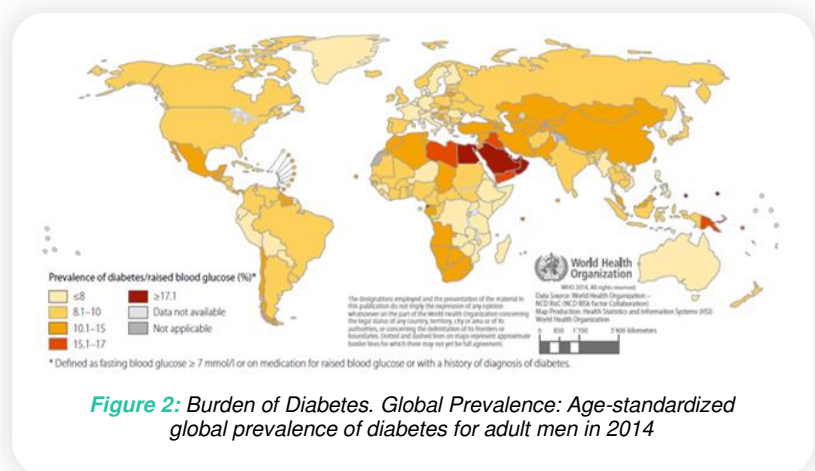
The MENA region saw a dramatic rebound in influenza incidence in the 21/22 season after the COVID-19 pandemic (Figure 1).<sup>1</sup> This is of serious concern given that the populations in this region have a very high proportion of high-risk individuals, and influenza vaccination rates are low.



**Figure 1:** Number of positive specimens by subtype/lineage and percentage of specimens testing positive for influenza viruses starting from week 27, 2021 to week 2, 2023

### MENA has large populations who are vulnerable to influenza

While the proportion of elderly persons in the Middle East is generally lower than in many other regions of the world at around 5.5% in 2020 (global average of 9.1%) the region has a very high incidence of many chronic diseases. For example, MENA has the highest prevalence of diabetes in the world, with 73 million adults living with diabetes in 2021, a figure which is estimated to increase to 95 million by 2030.<sup>2</sup> The prevalence of obesity in adults is also elevated particularly among women.



**Figure 2:** Burden of Diabetes. Global Prevalence: Age-standardized global prevalence of diabetes for adult men in 2014

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## Older adults and people with chronic health conditions are very vulnerable to influenza.

People with chronic health conditions such as heart disease, diabetes, and lung disease, are at increased risk of influenza-related complications, exacerbations of underlying disease, and functional decline, even if their condition is well-controlled.

### DID YOU KNOW?

#### The risk of heart attack may be 6X higher after influenza infection<sup>3</sup>

Even after apparently recovering from influenza, older adults may have a 6-fold and 8-fold increased risk of a heart attack or stroke, respectively.<sup>4</sup> This is due to persistent systemic inflammation and increased risk of blood clots associated with influenza infection. Furthermore, older adults may suffer permanent functional decline after influenza infection.<sup>5,6</sup>

People living with diabetes are also more susceptible to influenza. They have a higher likelihood of catching influenza and are 3 times more likely to be hospitalized, and 6 times more likely to die from influenza.<sup>7,8</sup>

### Vaccination protects the vulnerable

Influenza vaccination can reduce the risk of cardiovascular events by 34%.<sup>9</sup> In older adults, the protective effect of influenza vaccination is even more marked. In one study, vaccination was associated with a reduced risk of stroke by 30%, of heart failure by 22%, of hospitalization by 80%, and, remarkably, of all-cause mortality by 20%.<sup>10</sup> Equivalent levels of protection were seen in a study of people living with diabetes.<sup>11</sup> These data have led to calls for influenza vaccination being recommended as a coronary interventions for the prevention of acute coronary events.<sup>12</sup>

*“...estimates of the efficacy of the influenza vaccine in preventing heart attacks and strokes range from 15 to 45%, meaning that influenza vaccination is equal to or more effective than smoking cessation, statins, and antihypertensive therapy.”<sup>12</sup>*

### Key barriers to influenza vaccination uptake in MENA

A multidisciplinary group of subject matter experts analysed the reasons for suboptimal influenza immunization rates across the Middle East region using a methodology based upon the 6As taxonomy of determinants of vaccine uptake<sup>13</sup> (Figure 3).

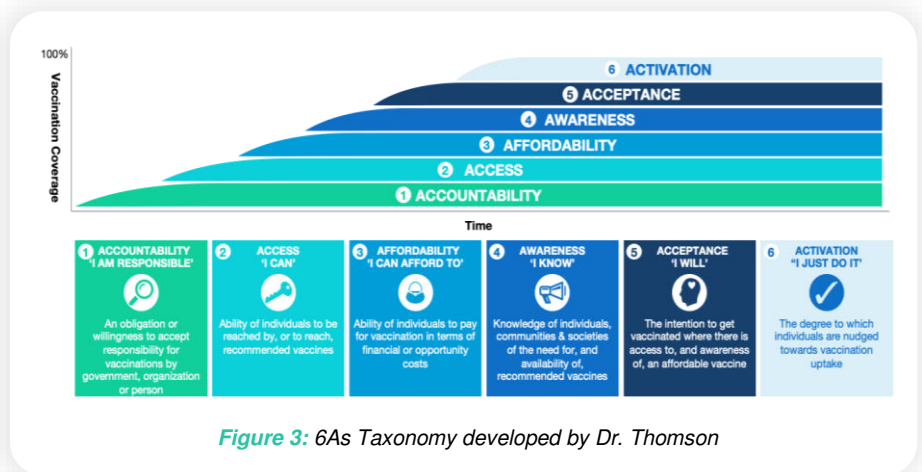


Figure 3: 6As Taxonomy developed by Dr. Thomson



Together the group made a preliminary mapping of the key barriers to influenza vaccine uptake which may be common across countries in the region.

## The three primary barriers were:

1

*Insufficient accountability for immunization program performance*

The accountability of national health authorities for the performance of an influenza vaccination program is a key determinant of high immunization rates.<sup>14</sup> While most countries in the MENA region have a national immunization policy against influenza, many lacked key policy and programmatic components which ensure strong accountability for program performance including:

- › Published disease surveillance data
- › Target vaccination coverage rates (VCR) for all priority groups
- › Published data on VCR
- › Full reimbursement

A failure to set targets and monitor VCR makes it very difficult to track and improve program performance.

2

*Low awareness, acceptance, and activation among healthcare workers*

Consistent with a large body of data, a doctor's recommendation was a potential motivator for influenza vaccination across most countries in the region where data was available. Yet almost every country represented in this workshop had identified health worker-related barriers including hesitancy, low perceived disease severity, vaccine concerns (safety and efficacy), lack of training, and failure to consistently recommend influenza vaccination.

3

*Low public awareness of the importance of influenza vaccination*

Similar barriers were identified in the public in many countries; hesitancy, low perceived disease severity, vaccine concerns (safety and efficacy), and lack of a recommendation from a HCW. Misinformation also emerged as a barrier in some countries.

## RECOMENDATIONS

Drawing upon the 6As VCR matrix, which enables the triangulation of barriers to vaccine uptake with proven policies and interventions, the expert group made a series of recommendations for national immunization programs in the region on key strategies which may increase influenza immunization rates.

### 1. Vaccinate HCWs.

HCPs may have more potential exposure to influenza virus, and more frequent contact with patients vulnerable to influenza. Countries should strive to reach high immunization rates among their HCPs.

### 2. Empower HCWs to recommend influenza vaccination.

HCPs are the multipliers of trust in vaccination, and a key driver of vaccine uptake. They need to know this and to be equipped to help people make healthy decisions like vaccination against influenza.

a) Run national or regional social behavior change communications campaigns to build HCP awareness of influenza vaccination and activation to recommend vaccination. This should highlight how influenza virus renders at-risk people very vulnerable to serious complications and exacerbations, and how vaccination protects against these risks.

b) Train HCWs on influenza disease and vaccination, and most importantly on how to effectively recommend vaccination and talk with patients about their concerns.

### 3. Countries should establish a national influenza vaccine deployment strategy.

This should be based on a local understanding of barriers to, and facilitators of, vaccine uptake. Ideally this strategy should be developed and owned by a multi-stakeholder taskforce and validated by the NITAG.

### 4. Health Authorities should set influenza vaccination coverage rates (VCR) targets.

Regular monitoring and communication of immunization rates for every target group can ensure accountability from all stakeholders for the performance of a program. This begins with countries collecting and publishing data on immunization rates.

*Concretely, we recommend that every country in the region collate and publicly publish data on influenza immunization rates in older adults and health workers.*

### 5. Employ context-driven social behaviour change communications

In a recent report, the WHO highlighted that:

*“Health-related behaviours at the individual, community and national levels [and of health workers] are essential to achieving desired health outcomes.”<sup>15</sup>*

Concretely, this means that all health communications should be informed by behavioural and social insights and tested for



efficacy on attitudes and intentions.<sup>16</sup> Countries should develop social behaviour change communications campaigns for both HCWs and the public which effectively increase knowledge of influenza disease and vaccination, build trust in vaccines, and facilitate easy access to vaccination.

*“Effective SBC communications are about engaging with people where they are, about what matters to them, through trustworthy voices.”*

– Dr Angus Thomson



SBC communications must be informed by listening and understanding people’s attitudes to vaccines in real time. Programs should integrate mechanisms such as social listening and behavioral pulse surveys to enable real-time understanding of attitudes and trust in vaccines and circulating misinformation.

Communications should be proactive, contain salient messages based on an understanding of the identity, worldview, or cultural and social values that may be influencing community’s decisions to vaccinate, be provided in familiar languages, and should come from trustworthy sources. They should be actively diffused to people in their communities, online or offline. In the MENA region, around 80% of adults (and an increasing proportion of older adults) are regularly using social media, with ~90% using Facebook. Concretely, *we recommend that every country in the region develop a digital SBC campaign for the 2023/24 influenza season which targets older adults and health workers.*

#### **6. Be prepared to identify and address misinformation**

Social listening can provide valuable insights to inform public health risk communication and community engagement actions. Vaccination programs may have various feedback mechanisms, but these are not always systematic and well-coordinated. Very few public health agencies routinely track vaccine misinformation for example. An effective social listening program should be equitable, accessing both online and offline vaccine conversations, and tightly coupled to risk communication and community engagement activities.



#### **7. Make vaccination as easy as possible**

Vaccination should be made available in convenient, accessible locations with equitable and empathetic service provision. Understand the vaccination journey of communities and iteratively remove points of friction.

## MEMBERS OF WORKING GROUP

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