Almost half the population of Syria has been displaced

No major health issues have been identified in the Syrian refugees

Working as a Quarantine Officer in Montréal
The Canada Communicable Disease Report (CCDR) is a bilingual, peer-reviewed, open-access, online scientific journal published by the Public Health Agency of Canada (PHAC). It provides timely, authoritative and practical information on infectious diseases to clinicians, public-health professionals, and policy-makers to inform policy, program development and practice.
INSIDE THIS ISSUE

OVERVIEWS

Syria: Land of history, civilizations and war
Mazigh M

Health considerations in the Syrian refugee resettlement process in Canada
Hansen L, Huston P

RAPID COMMUNICATION

Early observations on the health of Syrian refugees in Canada
Hansen L, Maidment L, Ahmad R

EYEWITNESS

My experience as a Quarantine Officer welcoming Syrian refugees
D’Amour R

ID NEWS

Adult asylum seekers from the Middle East including Syria in Central Europe: What are their health care problems?

An ambitious agenda for humanity
Syria: Land of history, civilizations and war

Mazigh M1*

Abstract

As the Syrians are welcomed into Canada, it is useful to learn about where they are coming from. Syria is an ancient land with a rich history and has always been home to diverse cultures, ethnicities and religions. Palmyra was an ancient civilization that arose during the second century. Syria became part of the land of Islam in AD 640 and was a cultural, religious and artistic center. During the Middle Ages, Syria came under the control of the Crusaders and was part of the Ottoman Empire from the early fifteen hundreds until the end of the nineteenth century. During World War I it came under French influence and was recognized as an independent nation after World War II.

In 1963, Hafez al-Assad led a military coup and since then, Syria has been ruled under emergency law. After al-Assad died in 2000, his son Bashar al-Assad was elected President in an uncontested presidential campaign. Before the current conflict, Syria had a population of approximately 22 million people but now about half the population have been displaced internally and into neighbouring countries, including approximately four million refugees. It is estimated that 250,000 people have died during the Syrian conflict.

Introduction

Syria is an ancient land with a rich history that has always been home to diverse cultures, ethnicities and religions. As the Syrians are welcomed into Canada, it is useful to learn about where they are coming from.

Syria is a semi-arid Mediterranean country with a diverse geography. It borders on Lebanon where there are fertile plains, Turkey where there are high Taurus Mountains and Iraq and Jordan where there is desert. Its climate is mild in winter and hot and dry in summer. The main cities of Syria are Damascus, Aleppo, Homs, Latakia, Idlib and Raqqa. During the winter, it may snow for few days but the snow never lasts long. The country is known for beautiful beaches in Latakia and high altitude landscapes in the Taurus Mountains. Most people in Syria live in the Euphrates River Valley and along the coastal plain, a fertile strip between the coastal mountains and the desert.

Cultural diversity

Syria is a culturally diverse country that prior to the current conflict had a population of approximately 22 million people (1). Syria has always been a rich mosaic created from diverse ethnic fabrics. Arabic is the official language, with different dialects depending on the region. Turkish, Kurdish, Armenian and Aramaic are spoken as well. Aramaic is believed to be the language spoken by Jesus and his disciples and is still spoken among Assyrians and in the liturgical ceremony of some Syriac Christians.

In terms of religion, approximately three quarters of the people are Muslims including both Sunnis, who constitute the largest religious group and Shiites such as Ismailis, Twelvers and Alawites. The Alawites control the military, intelligence and police and is the religion of the current president, Bashar al-Assad. Christians make up about 10% of the population and include Greek Orthodox, Catholic, Syriac Christians, Chalcedonian, Antochian and Armenian Orthodox. There are also Druze, Mandeans and Yazidi (whose religion has been linked to Zoroastrianism) (2). All Muslim and Christian holidays are official holidays in Syria.

The cultural mosaic of Syria also includes many immigrants and refugees. Since the 1800s there have been people settled in Syria from Afghanistan, China, Iran and Northern Africa. Following the 1948 Arab-Israeli war, Syria hosted more than 500,000 Palestinian refugees. In addition, Iraqis took refuge in Syria in 2003 during the United States-Iraqi war, as did the Lebanese in 2006 during the Israeli-Lebanese war (2).

Affiliation

1International Civil Liberties Monitoring Group, Ottawa, ON

*Correspondence: national.coordination@iclg.ca


Land of ancient civilizations

In approximately 10,000 BC, Syria was a centre of Neolithic culture where agriculture, cattle breeding and pottery appeared for the first time in world history. Ebla was founded around 3500 BC and archaeological excavations have uncovered gifts from Egypt’s Pharaohs which suggests the existence of trade relationship between the two civilizations (2).

Syria plays a significant and symbolic role in the history of Christianity. Apostle Paul converted on the Road to Damascus and became one of the most important figures of Christianity. Syria has many churches and monasteries which provide
historical evidence of the ancient and rich Christian heritage of the region.

Palmyra was an ancient civilization that arose along a trade route in an oasis during the second century. It was a Palmyrene king who defeated the Persian emperor and controlled the entirety of the Roman East Empire. Then his successor and widow Zenobia established the Palmyrene Empire which briefly conquered Egypt, Syria, Palestine, much of Asia Minor, Judah and Lebanon before it was brought under Roman control in AD 273.

Unfortunately the current conflict has damaged many of Syria’s ancient landmarks. Currently all six of Syria’s World Heritage Sites are on the endangered list (3).

Syria became part of the land of Islam in AD 640. The capital of Syria, Damascus (Dimashk or Al Sham, as its inhabitants call it in Arabic) was part of the Muslim Umayyad Dynasty in the seventh century and became a cultural, religious and artistic center. The famous Umayyad Mosque was built at that time and drew many scholars and visitors from all parts of the new empire (4).

Land of war
During the Crusades from 1098 to 1189, the Crusaders brought many Syrian regions under their control. Syria then became part of Egypt’s Ayyubid dynasty.

In 1516, the Ottoman Empire incorporated Syria. Arabic was kept as the official language and Damascus became the major stopover for Mecca. A social and legal system was developed that allowed all ethnic groups to live in relative peace and harmony, but this peace began to destabilize during the mid-19th century with the expansion of Western empires.

By the end of the 19th century, the Ottoman Empire came increasingly under British and French influence. During World War I a secret Sykes-Picot agreement was signed that divided the Ottoman Empire into two British and French zones of influence and Syria fell under the French mandate. In 1920, Syria and France negotiated a treaty of independence, but it was not ratified. It was only in April 1946, that the French started leaving the country and Syria was recognized by the United Nations (1).

Between the 1940s and the 1960s, Syrian politics were dominated by coups and turmoil. In 1956, Syria signed a pact with the Soviet Union as a result of the Suez Crisis and this established a long and deep Russian influence over Syria through military exchange and trade. In 1958, there was a merger between Egypt and Syria despite Syrian resistance to this.

In 1963, Hafez al-Assad was brought to power through a military coup. Since then, Syrian has been ruled under emergency law that has suspended the constitution and most of the civil rights for its citizens. Hafez al-Assad stayed in power from 1970 until he died in 2000. His son Bashar al-Assad was elected president in an uncontested presidential campaign.

Current situation
It is estimated that less half of Syria’s population is still living in their homes with over four million registered as refugees in neighbouring countries, such as Lebanon, Turkey, Jordan, Iraq and Egypt (5). There are approximately 7.6 million people who are internally displaced or are in neighbouring countries living in camps, in cities and rural areas but not easily reached by humanitarian aid (5). Since the civil war erupted the Syrian economy has fallen by over 60% and the Syrian pound has lost 80% of its value (2). It is estimated that 250,000 people in Syria have died during the Syrian conflict since it broke out in March 2011 (6).

Conflict of interest
None.

Funding
None.

References
Abstract

Canada has responded to the humanitarian emergency in Syria by committing to welcome 25,000 Syrian refugees by early 2016. This has been a complex undertaking which required coordination between international organizations, such as the United Nations High Commissioner for Refugees (UNHCR), the International Organization for Migration (IOM) and federal government departments, including Immigration, Refugees and Citizenship Canada (IRCC), the Canada Border Services Agency (CBSA), the Department of National Defence (DND) and the Public Health Agency of Canada (PHAC). Within and across Canada, this initiative has also required the collaboration of provincial and municipal governments, non-governmental organizations and volunteers, including private sponsors, to enable planning for the transition of Syrian refugees into a new life in Canada.

In planning for the reception of Syrian refugees, government agencies did not anticipate major infectious disease threats. However, early findings from Europe and the experience of health care providers who serve other refugee populations suggested that this population may have other unmet health needs and untreated conditions, due to their experience of displacement over the past three to four years. With this in mind, a great deal of planning has been undertaken to address potential challenges to public health. Social services providers and medical interpreters have been enlisted to help Syrians access the health care system and explain their needs. Communities of practice within Canada have responded, both in providing care and in developing and updating tools and resources to support a culturally sensitive and evidence-based approach to screening and meeting the health needs of the Syrian refugees.

Introduction

The Syrian refugee crisis is a complex humanitarian emergency, defined as a severe socio-political disruption that affects the ability of a population to access the basic necessities of food, water, shelter and physical security (1). Since 2011, Syria has been embroiled in a civil war, complicated by the rise of multiple rebel groups and the Islamic State in Iraq and Syria (ISIS). It is estimated that 250,000 civilians have been killed and about half the country's population of 22 million people have been displaced (2). By November 2015, the United Nations High Commissioner for Refugees (UNHCR) had documented almost four million Syrian refugees (3): Almost two million in Turkey, and over two million in Egypt, Iraq, Jordan and Lebanon. Others have been displaced within Syria, or fled elsewhere in North Africa and Europe.

In light of this humanitarian emergency, in the fall of 2015, the Government of Canada committed to resettle 25,000 Syrian refugees by early 2016 under “Operation Syrian Refugee”. This article describes the plan for the identification, screening and resettlement of Syrian refugees immigrating to Canada, with a specific focus on known and anticipated health needs. It also identifies some known challenges to health service provision to refugees, and strategies for how to address them. An accompanying article describes the experience of receiving the Syrian refugees and provides information on their initial health status (4).

Operation Syrian Refugee

Ensuring a safe and effective resettlement of thousands of refugees is a complex undertaking that involves coordination with foreign governments, international organizations such as the UNHCR, the International Organization for Migration (IOM), and a multiple departments within the Canadian government, including, among others, Immigration, Refugees and Citizenship Canada (IRCC), Canada Border Services Agency (CBSA), Department of National Defense (DND), and the Public Health Agency of Canada (PHAC), as well as provincial, municipal governments, non-governmental organizations and volunteers, including many private sponsors from churches and community organizations.
Resettlement strategy

The resettlement strategy is comprised of five phases.

1. Identifying Syrian refugees to come to Canada
   The UNHCR was responsible for the registration, security screening and selection of Syrian refugees from refugee sites in Lebanon and Jordan. The government of Turkey identified appropriate refugees within its jurisdiction. Immigration and security interviews were conducted by experienced visa officers. The Canadian government stated that priority would be given to the most vulnerable who were a low security risk: Women at risk, complete families and persons who may be discriminated against due to self-identification as lesbian, gay, bisexual, transgender or intersex (LGBTI) (5).

2. Processing Syrian refugees overseas
   Once cleared from a security perspective, refugees destined for Canada underwent an Immigration Medical Examination (IME), conducted by certified physicians, which is a standard requirement for all immigrants. In normal practice, an immigration applicant may be found inadmissible on health grounds, if his/her health condition is likely to be a danger to public health or public safety, or might reasonably be expected to cause an excessive demand on health or social services (6).

   For Operation Syrian Refugee, the IME was primarily used as a screening tool to identify and prioritize health care needs. The results of these tests were treated as confidential and shared with the refugees, including a paper copy of the examination findings with instructions for follow-up, as required. If an applicant was admissible but the IME identified a notifiable infectious disease, such as HIV, syphilis or latent tuberculosis, IRCC notified the appropriate local/regional public health authority in Canada where the refugee was destined.

3. Transportation to Canada
   After security, medical clearance and the issuance of an exit visa, the plan was for Syrian refugees to travel to Canada primarily through two types of flights. The majority were dedicated charter flights that flew to Toronto or Montréal and a smaller proportion were commercial flights that flew to any international point of entry in Canada. Prior to embarking on their flight, all travellers underwent a “fitness to fly” assessment by the IOM and other partners. This was conducted just before travel to assess whether there were any emergent health issues that would contraindicate travel (such as women in very late pregnancy or active labour) and to facilitate the arrangement of an appropriate level of health care, if needed, upon arrival (7). An IOM escort accompanied all charter flights for refugees destined for Canada.

   Most refugees had no obvious medical issues, some were identified to receive routine medical care and, when needed, a few were flagged to receive expedient medical care upon arrival.

4. Welcoming to Canada
   For the charter flights arriving at either Toronto Pearson International Airport or Montréal Pierre Elliot Trudeau Airport, all refugees were processed as permanent residents, screened for signs of illness and provided with Interim Federal Health Program documents. CBSA officers conducted routine border security checks.

   Travellers who appeared ill were assessed by a PHAC quarantine officer. After completing an assessment, quarantine officers determined the appropriate course of action. Based on the assessment and criteria of the Quarantine Act, a traveller could be directed to report to local public health authorities, present for further medical assessment or proceed to his/her eventual destination. When indicated, refugees would be referred immediately to emergency medical teams (EMT) provided by Ontario and Quebec provincial health authorities at the airport areas Welcome Centres. The EMT teams were available on site to assess and treat medical conditions and, where possible, to avoid unnecessary transfers to a hospital. As well, they were available to coordinate with local clinical care and local public health services as indicated (8).

5. Settlement and community integration
   Once cleared at the point of entry, the Syrian refugees began the transition to their communities. In most cases, in light of the long flights, this began with a brief stay at a hotel near the airport. Privately-sponsored refugees were placed with their sponsors and government-sponsored refugees were transferred to one of 30–35 community-based resettlement assistance programs across the country. Once in their community of destination, some refugees stayed temporarily at local hotels until permanent lodging was available. Interim lodging sites at Canadian Forces bases in Quebec and Ontario, supported by provincial Ministries of Health, the Canadian Red Cross and PHAC (9,10) were also set up as a contingency plan to house refugees. Transitional health services, such as dental health clinics and catch-up vaccination programs, were organized through local health authorities and the provincial health care systems.

   Community refugee resettlement agencies have supported refugee integration with language training and social services and by registering children in local schools. The Health Portfolio Operations Centre (HPOC), managed by PHAC, has coordinated the health aspects of the federal response and liaised with provincial and territorial health ministries. Provincial and territorial Ministries of Health have supported the coordination of care within their jurisdictions.

   A summary of the arc of assessments of and services for refugees from the identification and screening process in the Middle East to integrating into communities across Canada is illustrated in Figure 1.
Health settlement

Health settlement includes the provision of an evidence-based health assessment and the integration of refugees into the health system (11). As permanent residents, most newly-arrived Syrians were immediately eligible for provincial health coverage, since most provinces waived the three-month waiting requirement. In addition, new arrivals were covered for up to one year under the Government of Canada’s Interim Federal Health Program. Health care practitioners were directed to register with Medavie Blue Cross to provide services and products to Interim Federal Health Program beneficiaries. For the refugees and their families, this program covers supplemental services such as dental and vision care as well as prescription medications (12).

Health settlement has been worked out at the provincial and local levels across the country. In Ontario, for example, where approximately 10,000 refugees have resettled, the provincial government activated a Ministry Emergency Operations Centre to collaborate and share information across levels of government and with local partners. Ontario also developed the Ontario Health System Action Plan for Syrian refugees (13) which included a Health Care Provider Hotline and generic email address to respond to queries. Local Health Integration Networks (LHIN) facilitated the local planning and coordination of health services. For example, the Champlain LHIN helped to establish the Ottawa Refugees Health Task Force which included representatives from the City of Ottawa (including Ottawa Public Health), community health centres, area hospitals and settlement agencies. This Task Force developed a plan that included an Ottawa Newcomer Clinic as a screening hub to conduct an initial assessment for the refugees and to offer immunization and dental care. Once the refugees were settled into permanent housing, they were linked to a family physician in the community for ongoing primary care.

Primary care

Health practitioner networks to support the care of refugees have been strengthened in Canada in recent years, such as the Canadian Collaboration for Immigrant and Refugee Health (14). Resources for clinicians have been developed, including a patient-based guideline for the primary health care of Syrian refugees (11), an evidence-based clinical checklist from the Canadian Collaboration of Immigrant and Refugee Health (15), resources specifically for children from the Canadian Pediatric Society (16) and Syrian-specific mental health resources commissioned by the UNHCR (17).

Public health

Local and regional public health authorities have worked with health care providers to address the need for catch-up immunizations for Syrian refugees. Routine surveillance processes are in place and may be enhanced, if needed, to assess the impact of large numbers of new arrivals on the health system and to detect and respond to an emerging infectious disease issue (13). Provincial ministries have kept health professionals apprised of health issues as they arise, such as the need for urgent dental care.

Common challenges

The UNHCR Report has noted the majority of Syrian refugees have demonstrated a remarkable resilience and recover quickly once basic housing, food and security needs are met (16). Nonetheless, it has been anticipated that a small percentage of refugees in Canada will have complex or multiple health care needs. Based on previous experience with large refugee migrations to Canada and elsewhere, there will be inevitable challenges in providing effective health care to refugees.

A major challenge for the newly arrived Syrians will be to ensure they address and prioritize their health issues at a time when they are preoccupied with the resettlement process which includes finding housing, schools, integrating into their communities and finding social circles. In order to ensure the health system is prepared to respond to their health needs, networks of care providers and refugee health experts have begun reaching out to clinicians, providing guidance on expected health issues, including mental health. There is a need to provide appropriate support for these services such as enlisting medical interpreters who are able to translate medical terminology and are also prepared to “bear witness” to the pain and suffering of the refugees’ experience. At times interpreters

Figure 1: Assessments of Syrian refugees from the Middle East to Canada

Abbreviation: UNHCR=United Nations High Commissioner on Refugees
may be available only by phone. The use of interpreters with cross-cultural training has been associated with increased confidence of health care providers to care for refugees, better detection of problems at assessment and increased client satisfaction (18).

Based on the UNHCR Report, many Syrian refugees have experienced psychological and social distress after living in a war zone, being displaced from their home and coming to a new country (17). Many have lost family members and friends and may have witnessed or experienced violence. This can lead to emotional reactions (e.g., sadness, grief, anger), physical symptoms (e.g., fatigue, insomnia) and somatic complaints, or social and behavioural problems (e.g. withdrawal or aggression) (17). Refugees' experiences after arriving in Canada may worsen their distress. These post-displacement experiences may include challenges in securing appropriate housing and employment, and overcoming linguistic barriers, discrimination and social isolation (19-21).

Syrians, like other new immigrants, may be uncomfortable discussing feelings of isolation or distress, especially in a new environment. Current recommendations to health care providers are to actively address the health issues but not probe for trauma — as this may make things worse (11) — and to be alert for signs of post-traumatic stress disorder, depression and other mental health problems that may emerge months following arrival in Canada.

In order to address the mental health issues of Syrian refugees, different levels, or layers, of supports and services are indicated (17). The foundational layer is to address the social determinants of mental health, such as safe and adequate housing. The next layer is to assess and optimize family and community supports that foster cohesion among the refugee population. In some cases, focused psychosocial support may be needed to help refugees cope and adjust to Canada. These three layers will help address most mental health issues. If a major mental health issue arises, culturally sensitive mental health services are indicated; the UNHCR resource provides important insights into how this can be done (17).

Health care providers may become overwhelmed with the challenges of addressing the health care needs of refugees. Many health care providers are already oversubscribed and refugee health concerns are another issue that requires preparation and clinical care time. Despite the good intentions and the increasing number of resources available, the demands will be high and there is a risk that health care providers and others may experience compassion fatigue. This can be anticipated and addressed through optimizing the use of support resources offered by professional bodies and organizations, online and telehealth tools, formal and informal support groups and linking with agencies or others with expertise in resilience and addressing the mental health needs of those who respond to crises.

**Conclusion**

The Syrian refugees who are coming to Canada have made the difficult decision to leave their once-vibrant, ancient country that has now been devastated by war. Canada is bringing in refugees through a complex collaborative system that involves international organizations, multiple federal departments, provincial and municipal governments, non-governmental organizations and many thousands of volunteers. From a health perspective, the priority is to identify the physical and mental health needs of these newly arrived residents and to create accessible and culturally appropriate services to meet those needs.

There are challenges for the newly arrived Syrians in recovering from the trauma of living through a humanitarian emergency and adjusting to life in Canada. And there are challenges to health care and other service providers in meeting the needs of Syrian refugees. With planning, coordination, resources, mutual support and systems in place to identify emerging issues as they arise, all the components are in place to welcome the Syrian refugees and assist them effectively with their resettlement into Canada.

**Acknowledgements**

We wish to thank all those working at international, national, regional and local levels around the world to help bring Syrian refugees into safety.

Note: Dr. Huston is the Editor-in-Chief of the *Canada Communicable Disease Report* and recused herself from the editorial decisions involved in this article. Many thanks to Dr. Lee Lior for taking on the role as Editor for this article.

**Conflict of interest**

None.

**References**


Early observations on the health of Syrian refugees in Canada

Hansen L1, Maidment L1*, Ahmad R1

Abstract

Between November 4, 2015 and February 29, 2016, a total of 26,166 refugees came to Canada. Of those, only two (0.01%) were found to have signs of a notifiable disease in the Immigration Medical Examination and these individuals were referred to public health for follow-up. Most refugees - 24,640 (94.17%) - arrived by government-coordinated charter flights and underwent enhanced screening. Upon arrival in Canada, 274 refugees (1.11%) were assessed by Quarantine Officers for signs of a potential communicable disease (such as fever) and 10 (0.04%) were referred to hospital. Paramedics onsite at the airport assessed 1,212 refugees (4.92%). Fifty-four (0.22%) were transferred to hospital and many of these were known to require urgent medical care.

Provincial and local public health authorities and community networks have been instrumental in providing immediate and longer-term health care to arriving refugees. The two most immediate care needs were catch-up immunizations and dental care. Arriving in Canada at the height of the influenza season, a number of refugees experienced time-limited upper respiratory infections. When referring refugees to Canadian authorities, the United Nations High Commissioner for Refugees (UNHCR) advised that the Syrian refugee population may be expected to have high medical needs. These were not necessarily identified beforehand and may include diabetes, developmental disabilities, conflict-related injuries or mental health issues. These health care needs of Syrians will be identified and addressed as they integrate into the local health care systems.

The arrival of Syrian refugees in Canada has not resulted in any urgent public health concerns or need for public health intervention. Canada’s experience to date indicates that the arrival of Syrian refugees in this country can be managed in a way that will integrate them into the health care system without increased risk to public health.


Introduction

Health considerations figured prominently in Canada’s plan to welcome 25,000 Syrian refugees from December 2015 to early 2016. This plan was designed to welcome the refugees and integrate them into the local health care system while protecting Canadians from infectious diseases. Multiple government and non-governmental partners have been working together to implement this plan since the fall of 2015.

The European experience of receiving undocumented and “irregular” migrants in 2015 provided useful information and lessons that Canadian authorities were able to draw upon (1). For example, the European experience demonstrated that refugees from these areas did not pose an infectious disease threat to the domestic population, however they were vulnerable to conditions that spread readily within poor living conditions (2). Unlike in Europe, where the Syrian refugee crisis has meant that thousands of migrants have arrived without prior medical screening or registration, Canada was able to ensure that pre-arrival medical screening was in place. This served to protect public health and also helped connect refugees to the Canadian health care system.
Welcome Refugees: Health screening

From December 2015 to February 29, 2016, a total of 26,166 Syrian refugees and their families arrived in Canadian 99 separate flights. Of these, 14,992 refugees were government-sponsored and the remaining 11,174 were privately-sponsored or blended visa office referrals. While all travellers were subject to screening at international airports upon arrival, the health of refugees destined for Canada was also assessed at multiple points prior to arrival.

The Immigration Medical Examination (IME) was conducted prior to travel and assessed all potential immigrants for a short list of communicable diseases of public health importance. If any of these were found and the person remained eligible for refugee status, Immigration, Refugees and Citizenship Canada (IRCC) conveyed this information to local public health authorities in Canada for appropriate follow-up. To date, of the Syrian refugees who have arrived as part of the current resettlement effort, local public health officials were notified of only two individuals with chest x ray results from their IME indicating possible latent (non-infectious) tuberculosis. Local public health will refer these individuals for clinical care and surveillance. IRCC and the Public Health Agency of Canada are collaborating on further epidemiological analysis of the IME data.

In addition to the IME, once the refugees arrived in Canada, they were screened at the point of entry based on the federal government’s responsibilities under the Quarantine Act (3,4). Since the first charter flight of Syrian refugees arrived on December 10, 2015, Quarantine Officers at Toronto and Montréal airports who were trained nurses and physicians were on hand for each of the 99 flights carrying an average of 249 passengers. (For a first-hand account from one healthcare professional about this experience, see article by D’Amour in this issue [5].) Arriving passengers who appeared ill or had the potential of having a communicable disease were referred to Quarantine Officers for a more detailed evaluation with the support of an interpreter. Most of those identified were children who arrived after a long international flight with fevers, cough or vomiting. To date, Quarantine Officers assessed 274 Syrian refugees (approximately 1 %). Of those, ten were referred to local hospitals for further assessment and care and none had a communicable disease of public health concern.

Quebec and Ontario provincial medical teams were stationed at airport Welcome Centres to provide urgent care and assessed approximately 1,212 refugees (4.9%). In most cases, the emergency medical assistance teams were able to offer care on the spot and only 54 refugees were transferred to hospital. The physicians who accompanied the refugees on their charter flights to Canada were aware of travellers who had pressing health issues such as kidney disease and facilitated referrals to clinics and hospitals upon arrival (A Boucard, personal communication 25 January 2016).

The health status information of Syrian refugees upon arrival to Canada is summarized in Table 1.

Table 1: Initial health status of Syrian refugees in Canada, November 4, 2015 to February 29, 2016

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of refugees</td>
<td>26,166</td>
<td>100.00%</td>
</tr>
<tr>
<td>Government-sponsored</td>
<td>14,992</td>
<td>57.30%</td>
</tr>
<tr>
<td>Privately-sponsored</td>
<td>11,174</td>
<td>42.70%</td>
</tr>
<tr>
<td>Notifiable disease identified in IME</td>
<td>2</td>
<td>0.01%</td>
</tr>
<tr>
<td>HIV</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Latent TB</td>
<td>2</td>
<td>0.01%</td>
</tr>
<tr>
<td>Syphilis</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Enhanced screening upon arrival*</td>
<td>24,640</td>
<td>94.17%</td>
</tr>
<tr>
<td>Assessed by Quarantine officer for signs of infection</td>
<td>274</td>
<td>1.11%</td>
</tr>
<tr>
<td>Referred to local hospital</td>
<td>10</td>
<td>0.04%</td>
</tr>
<tr>
<td>Required urgent care by paramedics</td>
<td>1,212</td>
<td>4.92%</td>
</tr>
<tr>
<td>Transferred to hospital</td>
<td>54</td>
<td>0.22%</td>
</tr>
</tbody>
</table>

*From chartered flights between Dec. 10, 2015 - Feb. 29, 2016

Meeting the health needs of Syrian refugees

Health care providers in Canada have been working together to ensure a coordinated approach to addressing the ongoing health needs of Syrian refugees. The two provinces where Syrian refugees first arrived (Ontario and Quebec), have activated comprehensive health sector plans for refugee reception and resettlement (6,7). Local public health departments have geared up to meet the two greatest initial needs for Syrian refugees: Catch-up vaccinations and urgent dental care (8-10). The Canadian Collaboration for Immigrant and Refugee Health (CCIRH) has developed a checklist (11) which provides evidence-based recommendations for family physicians (12).

Gaps or delays in receiving health care have occurred due to delays in finding permanent housing for government-sponsored refugees in some instances and local challenges in delivery. Nonetheless, the decision by the initial provinces accepting refugees to waive the three-month waiting period for provincial health care insurance and the high degree of collaboration by local providers, have facilitated the integration of refugees into the Canadian health care system.

There is limited specific evidence on the health status of asylum seekers and refugees. Dr. Anna Banerji, a pediatric infectious disease specialist in Toronto who provided care to Syrian refugee families in immigrant reception centres in the period immediately following their arrival, observed that up to one third of refugee children suffered from common viral illnesses, such as upper respiratory tract, ear and throat infections and gastrointestinal illness. There was an influenza outbreak among 450 Syrian refugees who arrived in Edmonton, Alberta at the end of January 2016 (12). They arrived at the height of the influenza season and before they could all receive the influenza vaccine, approximately half the adults and most of the children became ill (13). These infections resolved with time and supportive care.

Consistent with the experience in the European Union, major mental health issues have not been identified to date among
the Syrian refugees. Post-traumatic stress disorder is likely to emerge over the long term, as refugees become settled in their new lives and are able to mentally process the stresses of war, displacement and loss. Cultural psychiatrists in Ontario and Quebec are providing e-consultations as part of an effort to build capacity for culturally sensitive mental health services across the country.

It is expected that chronic medical conditions will be revealed over time. Out of fear, refugees may under-report health issues in the assessment process (14), and it is expected that in otherwise ‘healthy’ refugees who have undergone the IME, 5% may have some form of ongoing health care need (M MacKinnon, personal communication 25 January 2016). In referring refugees to Canadian authorities, the United Nations High Commissioner for Refugees (UNHCR), advised that the Syrian refugee population could be expected to have “high medical needs”. These needs may include diabetes, developmental disabilities and conflict-related injuries. The pediatrician in the immigrant reception centre in Toronto agreed with the IRCC estimate and has found conditions ranging from seizures and developmental disorders, to blood transfusion dependent thalassemia and childhood cancers (A Banerji, personal communication 25 January 2016). The Co-Chair of the CCIRH has noted that malnutrition has been observed, and physicians have identified a number of children with intellectual disabilities, although it is too early to identify whether this is higher than the average incidence in North America. A pediatric surveillance system is being established to monitor this (K Pottie, personal communication 22 February 2016).

Conclusion

Large-scale refugee movements place pressure on health care systems, both in their immediate response and as part of long-term resettlement efforts. As Syrians integrate into Canada, meeting their longer-term health care needs will call for a seamless network of health care providers, supported by community partners. It will also require the ongoing commitment of government and academia to build the capacity of the health system by training the right people using the best available technology and monitoring for emerging issues.

Canada’s experience in recent weeks has illustrated that no major communicable disease concerns have arisen to date. As anticipated, Syrian refugees who have arrived in Canada have some outstanding health needs. The health sector is working to address these needs, while health care providers and the general population can rest assured that minimal risks have been posed to the public health.

Acknowledgements

We would like to thank and acknowledge all the people who have been part of the effort to welcome Syrian refugees to Canada.

Conflict of interest

None.

References

My experience as a Quarantine Officer welcoming Syrian refugees

D’Amour R1*

Affiliation
1Infectious Disease Prevention and Control Branch, Public Health Agency of Canada, Ottawa, ON

*Correspondence: rolande.damour@phac-aspc.gc.ca


I have been a nurse with the Public Health Agency of Canada for nearly 15 years. Last fall, I received an email requesting volunteers to support and assist quarantine officers during the arrival of Syrian refugees at the Montréal and Toronto airports. I asked myself, “Why not get out of my cubicle and my comfort zone and submit my name to help?” I sent in my application and soon after participated in quarantine officer training offered by the Agency’s Office of Border Health Services - Quarantine. During the training sessions, quarantine officers from various parts of the country presented the basics of training (such as our obligations under the Quarantine Act) which we had to learn and apply. Our days were filled with case simulations in small groups, where we discussed the procedure to follow for different scenarios. We practiced wearing personal protective equipment and were fit tested for the N-95 respirator. I then returned to my regular job and waited to hear whether I would be needed and if so, when and at which airport.

Weeks passed and like everyone, I began to hear news reports about the Canadian arrival of the first Syrian refugees. I thought about all the organization that was required at all levels and I could not even imagine all the coordination and collaboration involved. Then on Wednesday, December 30, I received the much-anticipated email asking me to come to Pierre Elliott Trudeau International Airport in Montréal the following Tuesday. I had been chosen! I felt excited and frightened at the same time. Was I up to it? I would need to reread my training notes!

I have been to a number of airports to fly to different destinations around the world. During those times, I was so preoccupied with ensuring I had my ticket and travel documents handy, I never really considered what was going on behind the scenes at the airport. Well, I was soon to find out that there is a whole team of people working diligently to prevent the introduction of communicable diseases into Canada. The team includes quarantine officers. I was on the team for 15 days.

Before the flights arrived, we met in the quarantine office for an information session regarding the details of the flight. Sometimes, the quarantine officers had basic information, such as the number of passengers or the presence of medical conditions that needed to be reported to the paramedics and to Immigration, Refugees and Citizenship Canada (IRCC). The quarantine officers were particularly concerned with passengers who were suspected of having a communicable disease. Those passengers would need to be seen and assessed and, if indicated, a report would be sent to local public health for follow-up.

After the pre-flight information session, we went to Gate 19, a large area dedicated to welcoming refugees. The first time I went in, I was impressed by the number of people there. Myself and IRCC colleagues were designated by a fluorescent yellow vest. Volunteers wore red vests and interpreters wore blue vests. Customs officers, dressed in black, were in a section with over 20 desks and computers, biometric equipment and other security devices. First responders also had a section. Security officers ensured that only authorized individuals entered the area.

A few minutes before the flight arrived, we were waiting with our team. The aisles were empty and we were whispering. We checked our quarantine officer kits to make sure that everything was in its place, that our tympanic thermometers were working and that we had enough quarantine report questionnaires and paper for note taking. When nearly 300 passengers of all ages came through the doors, we would have to act quickly and work efficiently!

That is when I most felt the nervousness and excitement. And it was not just me: The interpreters, volunteers and my colleagues from IRCC felt it too. Something big was about to happen.

A customs officer came to get us and asked two quarantine officers to get into the Passenger Transfer Vehicle (PTV), a large bus with a mechanism that allowed it to be raised to the doors of large airplanes. Then we waited for the plane to land.

Once the plane landed, the PTV approached, docked and we boarded the plane where the chief customs officer was already carrying out security procedures with his/her team. Mr. Joseph, the interpreter (who did not miss a single flight), made an announcement to welcome the passengers and asked them to remain seated while we worked. Our job was to check whether there were sick individuals on board and decide with the paramedic and the team whether the patient needed a wheelchair and should be examined.

I was surprised the first time I got out of the PTV and entered the plane. There was so much noise! I could hear the motor of the PTV, announcements on the microphone, discussions between the customs officers and the team, the hiss of the small ceiling vents and the passengers talking. We had to concentrate very hard when we met with medical escorts on board so they
could give us a report and tell us whether there were any sick passengers. If so, there would be work to be done by the paramedics or the quarantine officers.

After speaking with medical staff from the International Organization for Migration (IOM) who accompanied the refugees on the flight, we announced that people in the first rows could disembark from the plane and enter the PTV. The quarantine officers were the first to see each passenger disembark from the plane. We watched for any sign of a communicable disease, such as a cough, a rash or fever. If a sign was present, we met with the person to take his/her temperature and asked questions through an interpreter to assess whether or not they had a communicable disease. The passengers then got into the PTV with their families and their carry-on bags.

I must say the first trip in the PTV made me emotional, because I was meeting people who had left their country and their lives, to come to a new and strange country. Our eyes met and they spoke volumes without words. I said hello and welcomed them with my voice, and my eyes certainly conveyed the same message. They responded with a tired but relieved expression. A smile is contagious. It is a universal language. Everyone was calm, even the children.

We shifted into work mode and each of the customs officers, interpreters, volunteers, quarantine officers, security officers and first responders began to carry out their specific jobs and work together to complete the various steps of the arrival process.

The large families surprised me at first, bringing back memories of my childhood when families were larger than today. Syrian children are like any children: They smile when someone smiles at them. They waved back when we waved to them. On each flight, there was always a little clown, an outgoing child who would wave to us animatedly and give us a huge smile full of hope and gratitude. We noticed that the older children took care of their younger brothers and sisters when the parents would leave their chairs to meet with the customs officers, sometimes for a long time. The customs process takes time and everyone remained seated and calm. There was a lot of activity and the families remained close together moving from station to station for checks.

My days working there were very busy and I did not have much time to chat with my colleagues. However, I did have an opportunity to talk with a few volunteers who were allowed to assist us. Like me, they remarked on the cooperation among the teams and were touched by the humanity of what we called “Operation Hope”. We all enjoyed our experience.

The people I spoke with most often were our precious interpreters in the blue vests, who made it possible for us to communicate with sick passengers to explain that we were going to take their temperature, ask them questions and assess their signs and symptoms. Every detail was important and we had to be brief and clear because the passengers had experienced a long trip and there were still a few more hours to go before they arrived at the Welcome Centre where they would receive winter clothes, their health card and be seen at the clinic if necessary. At the Welcome Centre, the refugees would also meet their host family or be transferred to another Canadian city.

I witnessed small acts of kindness from the customs officers, who at first looked intimidating, dressed all in black with bulletproof vests. Although they looked serious and were focused on their work, they still took the time to be kind to the families. All of the teams noticed this and remarked on their efficiency.

I also noticed that, very often, the refugees spoke a few words of French or English. I knew only one word in Arabic: “Shukran,” which means thank you. One time, after examining a child with a cold, I was informed by an interpreter that next was a child showing symptoms of a fever. After finishing my exam, with the help of the interpreter, I told the child’s mother that the child did not have a fever and had no other symptoms. We encouraged her to remove the child’s heavy coat and tuque while waiting for the bus that would take them to the Welcome Centre. Before leaving, she said something I did not understand. I responded with “Shukran,” and she gave me a big smile and said “Thank you.”

My training as a nurse and my work at the Agency allowed me to be a part of this historic event. I played my part in the Syrian refugees’ extraordinary journey to Canada. I found working with them to be in line with my personal life philosophy and my values as a nurse and Canadian citizen: the belief and value of helping those who are vulnerable.

After I came home and would hear a plane flying overhead, it would bring me back to my recent experience and I would feel proud of having participated in “Operation Hope”. The next time I travel, I will have a big smile at the airport because I know what goes on behind the scenes: Teams of exceptional workers are there to protect our health and prevent the spread of communicable disease. I want to say a warm thank you to my colleagues, who were generous with their time and who worked so well in our newly minted team. It is not easy to coordinate with different colleagues all the time and work all hours of the day and night, but it was worth it. This was an experience I will never forget. Shukran!
Adult asylum seekers from the Middle East including Syria in Central Europe: What are their health care problems?


BACKGROUND: Forced displacement related to persecution and violent conflict has reached a new peak in recent years. The primary aim of this study is to provide an initial overview of the acute and chronic health care problems of asylum seekers from the Middle East, with special emphasis on asylum seekers from Syria.

METHODS: Our retrospective data analysis comprised adult patients presenting to our emergency department between 01.11.2011 and 30.06.2014 with the official resident status of an “asylum seeker” or “refugee” from the Middle East.

RESULTS: In total, 880 patients were included in the study. Of these, 625 (71.0%) were male and 255 (29.0%) female. The median age was 34 (range 16-84). 222 (25.2%) of our patients were from Syria. The most common reason for presentation was surgical (381, 43.3%), followed by medical (321, 36.5%) and psychiatric (137, 15.6%). In patients with surgical presentations, trauma-related problems were most common (n = 196, 50.6%). Within the group of patients with medical presentation, acute infectious diseases were most common (n = 141, 43.9%), followed by neurological problems (n = 70, 21.8%) and gastrointestinal problems (n = 47, 14.6%). There were no differences between Syrian and non-Syrian refugees concerning surgical or medical admissions. The most common chronic disorder of unclear significance was chronic gastrointestinal problems (n = 132, 15%), followed by chronic musculoskeletal problems (n = 108, 12.3%) and chronic headaches (n = 78, 8.9%). Patients from Syria were significantly younger and more often suffered from a post-traumatic stress disorder than patients of other nationalities (p < 0.0001, and p = 0.05, respectively).

CONCLUSION: Overall a remarkable number of our very young group of patients suffered from psychiatric disorders and unspecified somatic symptoms. Asylum seekers should be carefully evaluated when presenting to a medical facility and physicians should be aware of the high incidence of unspecified somatic symptoms in this patient population. In general, there is no major difference between asylum seekers from Syria when compared to other nationalities of asylum seekers from the Middle East.

An ambitious agenda for humanity


Protracted conflicts continue to harm human health and wellbeing. In Yemen, 21 million of 24 million people are now in need of humanitarian assistance and 15 million lack access to health care. In Syria, despite a recent ceasefire agreement, fighting looks set to continue into its sixth year... Worldwide, 60 million people have been forced from their homes by conflict and violence. Additionally, 218 million people are affected by disasters every year.

What can be done to prevent and ameliorate this large-scale human suffering and improve our global response? The first-ever World Humanitarian Summit (May 23-24, 2016) in Istanbul, Turkey, hopes to have some answers. The Summit, convened by the UN Secretary-General Ban Ki-moon, aims to not only seek better ways to meet the needs of people affected by crises, but also to link aid with sustainable development, and work to prevent conflicts and build resilience against disasters...

Ban Ki-moon (has) released his report for the meeting—One Humanity: Shared Responsibility—which presents his vision for humanitarian reform. The report sets out five core responsibilities for the international community: political leadership to prevent and end conflicts; strengthen compliance to international law; ensure no one is left behind; move from aid delivery to ending need; and political, institutional, and financial investment into this agenda.