CARING FOR SYRIAN REFUGEES: A GUIDE FOR PRIMARY CARE PROVIDERS IN ONTARIO –
Niagara Region Edition

December 30, 2015

Edited by:
Dr. Sarah Chaudhry
Dr. Stephanie Cargnelli
Dr. Laurel Laakso
Dr. Balal Lone
A special thank you to our senior advisors on this project, Dr. Karl Stobbe and Dr. Maynard Luterman. Your kindness and support of this project is greatly appreciated and we could not have done it without your help. Thank you!

- The Editing Team
Disclaimer

The purpose of this booklet is to inform healthcare practitioners about common health issues they may encounter when caring for Syrian refugee patients. While the authors have conducted extensive research into their respective sections, we have also included appropriate pre-existing templates, summaries, and health care tools specific to newcomer and refugee health. We do not take credit for these pre-existing templates, summaries and health care specific tools. This was done with the intent of promoting awareness around these resources and these specific resources are cited where appropriate.

Please note that the editors and authors have taken all reasonable precautions to verify the information found in this booklet. The information presented in the booklet is meant to serve as a guide for clinical decision-making based on the most up to date information available at time of publication. The booklet is being published and distributed without any type of warranty and by using the booklet, you agree to absolve the editors and authors from any liability resulting from your use of the booklet.
# Table of Contents

- **Demographics and Politics of Syria**  
  Page 5
- **Interim Federal Health Program**  
  Page 8
- **Dental Coverage**  
  Page 15
- **Barriers to Care**  
  Page 17
- **Immigration Medical Exam**  
  Page 21
- **Primary Care Considerations**  
  Page 24
- **Primary Care Templates**  
  Page 27
- **Chronic Diseases**  
  Page 32
- **Preventative Interventions and Chronic Disease Considerations**  
  Page 36
- **Immunizations**  
  Page 38
- **Infectious Diseases**  
  Page 42
- **Mental Health Considerations**  
  Page 50
- **Oncologic Considerations**  
  Page 56
- **Women’s Health Considerations**  
  Page 59
- **Pediatric Considerations**  
  Page 68
- **Common Medical Phrases Phonetically Translated into Arabic**  
  Page 77
- **List of Contributors**  
  Page 80
Demographics and Politics of Syria
Written By: Myra Khan and Dr. Sarah Chaudhry

The following section is summarized from Population Profile: Syrian Refugees, written by Citizenship and Immigration Canada (2015)\(^1\). Some specific points were taken from other sources and are referenced accordingly.

Why Is There A Crisis in Syria?

President Bashar al-Assad has been the leader of the Syrian Arab Republic after winning unopposed elections in 2000\(^1,2\). He succeeded his father, Hafiz al-Assad, who ruled Syria for 30 years before his death in 2000\(^1\). After al-Assad’s election in 2000, there were hopes of political reform\(^1\). Instead, the election was followed by many years of political repression and continued government corruption\(^2\). In 2011, protests in Syria coinciding with the Arab Spring movement began with calls for democratic reforms, multi-party elections, and the end of the al-Assad regime\(^2\).

In the wake of the protests, the Syrian government retaliated by using heavy artillery and chemical weapons on protestors\(^2\). The regime also arrested anti-regime protestors, tortured individuals, and engaged in violence and interrogations\(^2\).

Many civilians have been caught in the conflict and crossfire between rebel groups and government brutality\(^2\). Approximately eight million people have been displaced within Syria and there are approximately four million registered refugees in the neighbouring countries. More than half of the displaced population is comprised of children\(^3\).

![The Worst Humanitarian Crisis in the World Today](Image from: World Vision website)
Asylum Countries and Living Conditions
The majority of Syrian refugees fled to neighbouring countries initially. These include Turkey, Iraq, Lebanon, Jordan and Egypt. Iraq, Turkey and Jordan are the only countries that have formal refugee camps. However, 85% of Syrian refugees live in extremely poor conditions in urban centers or makeshift dwellings. There is lack of access to proper shelter, healthcare, clean water, sanitation, schools and income generating activities in such settings.

Fast Facts On Declining Health Care
- As of 2015, “at least 610 medical personnel have been killed and there have been 233 deliberate or indiscriminate attacks on 183 medical facilities” – Physicians for Human Rights.
- According to the World Health Organization (2014), “40% of Syria’s ambulances are destroyed and 57% of public hospitals are severely damaged, with 37% remaining out of service”.
- According to a 2013 BMJ article, "WHO estimates that some 80,000 doctors have emigrated, leaving just 37,000 in Syria".
- “At least 160 doctors have been killed and hundreds jailed... 90% of pharmaceutical needs that were locally produced prior to the conflict and has now been reduced to only 10% contributing to significant drug shortages”.

For more information please refer to the following Citizenship and Immigration Canada document:

References


Back to Table of Contents
Interim Federal Health Program
Written By: Ramya Kancherla and Dr. Sarah Chaudhry

The bulk of the following section is summarized directly from the *IFHP Information Handbook for Health Care Professionals*. Other sources used include the Citizenship and Immigration Canada (CIC) website and Health Care CAN.

For a more detailed explanation, please visit:
http://refugeehealthontario.ca/or
or https://provider.medavie.bluecross.ca/

Interim Federal Health Plan Coverage (IFHP)
IFHP Website Statement: “The Interim Federal Health Program (IFHP), funded by Citizenship and Immigration Canada (CIC), provides temporary health care coverage for the non-insured populations who are either awaiting an immigration decision, or who are resettling in Canada in order to reduce risks to public health, ensure care for these populations, and assist with their successful integration into Canadian society.”

Physicians must register with the IFHP to be compensated for the services that they provide to Syrian refugee patients. These patients will be classified as Type 1 refugees under the IFHP (both government funded and privately sponsored refugees).

Medavie Blue Cross is the insurance company through which IFHP claims are submitted and processed.

Register and Check Your Patient’s Coverage

1) Register with Medavie Bluecross at: www.bit.do/ifhpregistration
2) Check to see if your patient is eligible for IFHP with Medavie Blue Cross to confirm coverage
   - CIC recommends that you do this **BEFORE** each visit, as patient eligibility and coverage can be modified without notice.

Eligibility can be determined by:
- Calling Medavie Blue Cross at 1-888-614-1880, or
- Log into the secure section of the [provider web portal](https://provider.medavie.bluecross.ca/)
  - You will need the Client ID number (UCI number), which is an **eight-digit** number appearing in the upper right-hand corner of the document.
- These sources may also be helpful:
  - Quick Reference Guide – Verify Patient Coverage (PDF, 242 KB)
  - IFHP Information Handbook for Health Care Professionals (PDF, 9.4 MB)
How Refugee Patients Obtain IFHP Numbers

Eligibility for IFHP is determined during a patient's initial visit with CIC or the Canadian Border Services Agency, or as soon as possible thereafter. Once eligibility is determined, patients are issued either a ‘Claimant Document’ (with photo) or an Interim Federal Health Program Certificate (IFHC).

Interim Federal Health Certificate of Eligibility (IFHC)

![Image of IFHC]

(Images from IFHP Information Handbook for Healthcare Professionals)

Refugee Protection Claimant Document (RPCD)

![Image of RPCD]
PLEASE NOTE: Providers MUST verify the current eligibility status of the patient, even when the presented document indicates that IFHP coverage has not expired. As immigration
status changes or a patient’s eligibility changes, the CIC may cancel or modify the patient’s IFHP coverage. **The IFHP cannot reimburse claims for any patients who are ineligible for the program at the time of service provision.**

**The Process of Submitting a Claim**

- **Claims must be submitted within 6 months from the date that the service was provided.** Claims submitted after this point will not be eligible for payment.
- Every time a patient is seen, a new claim form must be submitted. Forms can be filled out by hand and mailed; faxed to Medavie Bluecross; or submitted electronically. Mailed and faxed claim forms must have signatures from both the provider and patient.
- Paper and electronic forms can be found at [www.provider.medavie.bluecross.ca](http://www.provider.medavie.bluecross.ca)
  - **Fax number**: 506-867-3841
  - **Mailing Address**: “Interim Federal Health Program,” Medavie Blue Cross, 644 Main St. PO Box 6000, Moncton, NB EIC 0P9
  - **Electronic Submissions** – Go to the [Provider Portal](http://www.provider.medavie.bluecross.ca) and sign in using your username and password. Click on the “Claims” tab and select “Submit a Claim.”
    - For more help with electronic claims submissions, please visit the [Electronic Claims Submission Guide](http://www.provider.medavie.bluecross.ca).
- Once claims are reviewed and verified by Medavie Blue Cross, payment to the provider will be made. This can take up to 30 days.

**Refugee Coverage (IFHP + OHIP) Fast Facts**

- Under the Interim Federal Health Program, both Government Assisted Refugees and Privately Sponsored Refugees will be eligible for Type 1 benefits under the IFHP.
- **Type 1 benefits include:**
  - **Basic**
    - Includes most services that residents are covered for under their provincial or territorial health insurance plans.
  - **Supplemental**
    - Includes limited dental and vision care; services by allied health care providers (ie, physiotherapy); medical supplies and equipment (ie, diabetic supplies, hearing aids, mobility aids)
  - **Prescription drug coverage**
    - Includes most prescription medications and other products listed on Provincial/Territorial public drug formularies
- The basic coverage lasts for up to one year. However, once a refugee registers for OHIP, access to basic coverage will cease.
- However, supplemental and prescription drug coverage will last for **up to one year** even after registry with OHIP.
- Syrian refugees entering can register under OHIP anytime after arriving in Canada at a Service Ontario location. They are exempt from the usual three-month waiting period for OHIP.
- Further information regarding basic, supplemental, and prescription drug coverage can be found at: [https://provider.medavie.bluecross.ca/](https://provider.medavie.bluecross.ca/)
Basic Coverage and Transition to OHIP
Basic coverage is the most comprehensive aspect of the IFHP. This includes:

- In-patient and outpatient hospital services
- Services of medical doctors, registered nurses and other health professionals licensed in Canada, including pre and postnatal care
- Laboratory, diagnostic and ambulance services

These services are further outlined in the Basic Benefit Coverage grid and will be included until these individuals are registered under OHIP. Registry under OHIP can be completed at a Service Ontario location anytime after arrival, as the three-month waiting period to apply for OHIP has been waived for Syrian refugees.

When submitting physician services or professional fees, the provincial physician code(s), plus time units, must be indicated. As there are various stipulations for specialist coverage, please refer to the Basic Benefit Coverage grid.

Supplemental Coverage
In addition to basic coverage, supplemental coverage is provided for the first twelve months, regardless of OHIP status. Supplemental coverage includes benefits such as:

- Emergency dental care;
- Limited vision care;
- Home care and long-term care;
- Services by allied health-care practitioners including clinical psychologists, occupational therapists, speech language therapists, and physiotherapists;
- Assistive devices, medical supplies and equipment including:
  - Orthopaedic and prosthetic equipment
  - Mobility Aids
  - Hearing Aids
  - Diabetic supplies
  - Incontinence supplies
  - Oxygen equipment

In order to access many of these services, prior approval is required from Medavie Blue Cross. Individuals seeking these services need to have their service provider send the following information to the Special Authorization Department at Medavie:

- **Provider details**: name, provider number, phone number, fax number and name of referring physician;
- **Client details**: name, date of birth, and eight digit ID number;
- **Service details**: diagnosis or ICD code, cost, and other details
- The prescription from a referring physician must outline why the patient needs these services and the therapeutic benefits of this treatment.
- Additionally, a quote or estimate from the party that will be providing these services.

---

1 Medavie Blue Cross representatives have stated they have not been given an exact timeline for the expiry of supplemental and prescription drug coverage from CIC as of yet. However, they are currently stating the one-year time frame is definite and may be extended if anything.
Prior approval requests for health, dental and vision care services must be sent directly to Medavie Blue Cross through the secure provider web portal at https://provider.medavie.bluecross.ca, by mail, via fax to 506-867-3824 or by calling 1-888-614-1880.

The estimated turnaround time is unavailable. However, if there is no response by mail within 10 business days, then it is recommended to follow-up to confirm authorization for these services.

**Dental Care**
Dental care is covered on a limited basis under the IFHP. Initial services are limited to emergency relief of pain or infection only. If further treatment is necessary, a prior approval request must be submitted to Medavie Blue Cross before treatment is begun. Please refer to the [Dental Coverage](https://provider.medavie.bluecross.ca) document on the provider portal.

**Vision Care**
Vision care services are covered on a limited basis under the IFHP. Individuals are eligible to one full/partial eye examination every 12 calendar months, as well as one pair of eyewear (frames and lenses) every 24 calendar months. Those 18 years of age or younger are entitled to new eyewear whenever there is a change in prescription.

**Mental Health Services**
Refugees are eligible for psychotherapy or psychology counselling in a private clinic or addiction centre, for a maximum of ten sessions. Prior approval requests for additional sessions must be accompanied by a physician’s recommendation. Translation services can be billed alongside Psychiatry and Psychotherapy or Post-Arrival Health Assessment with a prior approval request form.

For further information on supplemental coverage, please refer to the provider portal's [Supplemental Coverage Benefit Grid](https://provider.medavie.bluecross.ca) or the [Information Handbook for Health Care Professionals](http://www.healthcarecan.ca/wp).

**Prescription Drug Coverage**
Prescription drug coverage under IFHP includes prescription medications and other products listed on provincial-territorial public drug plan formularies for twelve months after the date of arrival. For these regular drug benefits, prior approval is not required and pharmacy providers can submit claims through the Point of Sale system. Prior approval is required for medications that are listed as restricted use, limited use, exceptional status or special authorization within the provincial drug plan.

**References**


Dental Coverage for Refugee Patients in Ontario
Written By: Rabiya Sheikh

The suboptimal oral health status of Syrian refugees has become a growing concern. Due to the adverse consequences of war, refugees are deprived of proper dental care outlets, leading to declining dental hygiene and increased periodontal diseases, especially for children¹.

Children have been reported to develop caries quite early on, which can lead to several conditions including: difficulty speaking, tooth pain, damage to permanent teeth, increased risk of chronic inflammation, loss and decay of teeth, and additional oral infections¹.

Currently, the Interim Federal Health Program (IFHP) is responsible for paying for both adult and child refugee medical services. The IFHP program restricts dental care to serious, emergency dental conditions and does not cover any routine dental exams².

Please see the IFHP Information Handbook for Health Care Professionals (PDF, 9.4 MB) for more information regarding specific dental coverage.

Long-term care specifically for children and youth:

Long-term medical coverage can be attained through the Ontario Health Insurance Plan (OHIP), which will cover some dental surgeries if performed in a hospital. However, OHIP will not cover any regular dental fees from a dental office³.

Healthy Smiles Ontario Program - Any child (younger than the age of 17) who is a resident of Ontario with no other dental coverage, and comes from a household with a net income <120,000/year, is eligible for regular, free dental service. This includes: check-ups, cleaning, fillings, x-rays, and scaling⁴.

Programs combined in the Healthy Smiles Ontario program include the following:

- **Ontario Works⁴**
- **The Ontario Disability Support Program** - Dependent children (under the age of 18) who are in possession of an OHIP card and live with a disabled parent are covered for the following: "Basic diagnostic, preventive, restorative, endodontic, periodontal, prosthodontics, oral surgery services" as well as "general anaesthesia and sedation"¹⁴.
- **Assistance for Children with Severe Disabilities (ACSD)** – Available for children with severe disability. All other requirements and coverage are the same as the Ontario Disability program. General anaesthesia and sedation not included¹².
- **Children in Need of Treatment (CINOT)** - Any child (under the age of 18) with urgent dental conditions coming from a low-income family is eligible. The plan includes: “oral exams, x-rays, topical fluoride, cleanings, fillings, root canals, extractions, and out-of-hospital anesthetic coverage”¹⁴.
References


Barriers to Care
Written By: Mo Moore

The following section is summarized from *Barriers and Facilitators to Health Care for Newcomers*, edited by Caulford & Mayhew (2014)\(^1\). Some specific points were taken from other sources, and are referenced accordingly.

The broad role of the primary physician will be:

**Help navigate systemic barriers** by being well informed on issues pertaining to refugee status and healthcare eligibility, and being aware of local community resources.

**Build trust** by emphasizing confidentiality and continuity of care.

**Address language/cultural barriers** through appropriate use of interpreters and addressing cultural gaps.

### Systemic Barriers

**Barrier: Confusion regarding complex healthcare eligibility and entitlement categories. Some newcomers are uninsured or underinsured.**

**Important information to know:**

- Healthcare coverage of different refugee groups under provincial health care and Interim Federal Health Program (IFHP).
- Provision of emergency care is a legal and ethical obligation under the Canadian Medical Association's Code of Ethics and framed in provincial/territorial hospital acts\(^2\).

**What you can do:**

- Determine your patient’s refugee status and their healthcare coverage (reassure patients, as they may be reluctant to disclose their status for fear of negative consequences)
  - **Educate** patients on the healthcare services they can and cannot access.
  - **Register** with Medavie Blue Cross (the plan administrator for IFHP) and check your patient’s coverage at every visit to see if their eligibility has changed.
  - **Take coverage into consideration** when managing patients, as many refugees face financial barriers and may avoid or delay care if they cannot afford services.
- Know where coverage gaps exist and try to find appropriate care for uninsured patients.
Check with nearby hospitals for what constitutes an emergency prior to sending uninsured patients. You may want to outline a letter to ER staff explaining why the illness/injury constitutes an emergency.

Check with Medavie Blue Cross if your patient is covered for the services that you have planned for them.

Direct uninsured patients to local resources such as community health centers and refugee health centers that offer healthcare for the uninsured.

Barrier: Limited access to physicians and physicians’ lack of relevant knowledge.

What you can do:
- Encourage your clinic and others to accept more refugee patients
  - Streamline your practice for increased efficiency (For example – have one person trained in refugee coverage and IFHP billings process to run the payment process).
  - Network with other physicians in the community to pool interest in accepting newcomer patients, and to share information and resources.
- Educate yourself on relevant knowledge
  - Read about certain diseases that are uncommon in Canada but may be encountered in refugees (For example – tuberculosis, malaria, malnutrition) and issues relevant to the refugee population (For example – mental health, trauma).

Mistrust

Barrier: Refugees may not seek care because of mistrust of government and unwillingness to disclose personal information.

Important information to know:
- Refugees are more likely to have a negative attitude toward authority if they have experienced detention, abuse and torture, insecure residence, or separation from their family.

What you can do:
- Build trust
  - Emphasize strongly that patient information is confidential.
  - Connect patients to trusted community resources and reinforce that they are supported.
  - Encourage a positive relationship with staff and train staff in cultural competencies.
  - Accommodate your patients’ schedule by providing flexible appointment times and provide printed reminders to improve appointment attendance.
Language and Cultural Barriers

**Barrier: Gaps in language leading to miscommunication.**

**Important information to know:**
- 46% of Syrian refugees resettling to Canada in 2014 spoke at least one of either English or French. It is therefore expected that language barriers will be a common challenge.
- Arabic is the native language of 90% of the Syrian population.

**What you can do:**
- Use an appropriate interpreter
  - Use a trained interpreter when possible – ensure the patient is comfortable with the interpreter (ie. address gender preference, if necessary).
  - If a trained interpreter is not available, use a community representative or family member.
  - Avoid using children or adolescents as interpreters because it is a heavy burden and the information may be less reliable.

**Barrier: Differing ideas about health, illness, and healthcare.**

**What you can do:**
- Culture impacts many facets of health and healthcare in a way unique to the individual. Thus, general statements cannot be made on how Syrian refugees will view health and healthcare. The physician must therefore must maintain open communication and be aware that cultural gaps exist.
  - Be upfront about the role of primary physicians and the services they deliver, to address stereotypes the patient may have.
  - Emphasize the role of primary care in prevention, continuity of care, and screening, as newcomers may not have experienced the benefits of regular visits to a family doctor, or may have previously sought most of their care from walk-in clinics or hospital emergency rooms.
  - Be aware that culture may impact information gathering (ie. eliciting sensitive information may take several visits), decision-making (ie. patients may wish to consult with family before making decisions), and management (ie. patients may have different ideas of the role of biomedical treatments).
  - Ask about patient preferences and take action toward fulfilling them.

References


Back to Table of Contents
Immigration Medical Exam
Written By: Dr. Katie Dalziel

The following section is summarized from the Immigration Medical Exam section of the 2013 Panel Member’s Handbook from the Government of Canada official website.

Immigration Medical Examination (IME)
The initial medical exam completed for immigrants entering Canada includes a thorough medical history and physical examination. This is completed at designated panel clinics. Several check points exist to verify the client’s identity throughout the process.

History:
The CIC requires detailed histories for all medical conditions, including:
- Date of diagnosis
- Date of treatment or surgery
- Relevant medications
- Current status of condition (prognosis)

In addition, the CIC requires further testing if the following history screens are positive:

<table>
<thead>
<tr>
<th>Positive History</th>
<th>Additional Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>TB</td>
<td>CXR, HIV, Hep B/C</td>
</tr>
<tr>
<td>Close TB contact</td>
<td>TST, CXR if + TST</td>
</tr>
<tr>
<td>Prolonged medical tx or hospitalization for any reason, including major operation or mental illness</td>
<td>Medical report</td>
</tr>
<tr>
<td>Psychiatric Disorder</td>
<td>Psychiatrist’s report</td>
</tr>
<tr>
<td>HIV</td>
<td>HIV, CXR, Hep B/C, syphilis, HIV specialist report with CD4 count, HIV viral load, and when medications will be needed</td>
</tr>
<tr>
<td>Hep B/C positive</td>
<td>HIV, CXR, Hep B/C</td>
</tr>
<tr>
<td>Cancer or malignancy (last 5 years)</td>
<td>Oncology report</td>
</tr>
<tr>
<td>Diabetes</td>
<td>U/A, Serum Cr, HbA1c</td>
</tr>
<tr>
<td>Heart condition (CAD, HTN, valvular or congenital disease)</td>
<td>BP, Serum Cr, evidence of end organ disease</td>
</tr>
<tr>
<td>Blood condition</td>
<td>Hx of admission</td>
</tr>
<tr>
<td>Kidney or bladder disease</td>
<td>U/A, Serum Cr</td>
</tr>
<tr>
<td>Chronic physical or intellectual disability affecting independent functioning and full time work</td>
<td>ADLs, GAF, Chart of early childhood development (CECD), cognitive function assessment</td>
</tr>
<tr>
<td>Addiction</td>
<td>Psychiatrist’s report. If IV drug use – Hep B/C, HIV</td>
</tr>
<tr>
<td>Prescribed Medications</td>
<td>List of medications and indication</td>
</tr>
<tr>
<td>Pregnancy</td>
<td>EDD. These patients may defer CXR</td>
</tr>
</tbody>
</table>
**Physical:**
A full and thorough physical examination is completed. Any abnormality found during the physical exam must include the following details in the final IME report:

- Pertinent history
- Diagnosis
- Treatment details (dates and medications)
- Lab results
- Specialist reports
- Current status and prognosis

Recommended further testing is outlined below for positive physical examination findings:

<table>
<thead>
<tr>
<th>Abnormal Exam Finding</th>
<th>Additional Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>HIV testing, paediatrician/school reports if &lt;2 years</td>
</tr>
<tr>
<td>Weight</td>
<td>HIV testing, paediatrician/school reports if &lt;2 years</td>
</tr>
<tr>
<td>BMI</td>
<td>Underweight – HIV. Overweight – CVD, HTN, DM, renal dx, serum Cr, U/A</td>
</tr>
<tr>
<td>Head Circumference</td>
<td>Paediatrician/school reports</td>
</tr>
<tr>
<td>Hearing</td>
<td>Specialist reports</td>
</tr>
<tr>
<td>BP</td>
<td>Serum Cr, screen for end organ disease</td>
</tr>
<tr>
<td>CVS</td>
<td>Serum Cr, cardiologist report if needed</td>
</tr>
<tr>
<td>Respiratory</td>
<td>If signs of TB: CXR, HIV, Hep B/C</td>
</tr>
<tr>
<td>Nervous System (stroke deficits, CP, other)</td>
<td>ADL, GAF, CECD, cognitive function assessment</td>
</tr>
<tr>
<td>Mental and cognitive state</td>
<td>ADL, GAF, CECD, cognitive function assessment</td>
</tr>
<tr>
<td>Intellectual Ability</td>
<td>ADL, GAF, CECD, cognitive function assessment</td>
</tr>
<tr>
<td>Developmental milestones (&lt;5 years)</td>
<td>CECD, paediatrician report is available</td>
</tr>
<tr>
<td>GI system</td>
<td>Hepatomegaly: Hep B/C, ALT, specialist report if positive</td>
</tr>
<tr>
<td>MSK</td>
<td>ADLs</td>
</tr>
<tr>
<td>Skin and Lymph nodes</td>
<td>Screen for skin cancer, surgical scar, tattoos, piercings, and leprosy.</td>
</tr>
<tr>
<td>Signs of substance abuse</td>
<td>Psychiatrist report, HIV, Hep B/C if IV drug use</td>
</tr>
<tr>
<td>Endocrine</td>
<td>DM screen</td>
</tr>
</tbody>
</table>

Further testing may be warranted based on history and physical findings. However, a few age-based mandatory tests have also been outlined (Table 1).
Table 1: Mandatory age-based tests for the IME

<table>
<thead>
<tr>
<th>Test</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urinalysis</td>
<td>≥ 5 years</td>
</tr>
<tr>
<td>Chest X-ray</td>
<td>≥ 11 years</td>
</tr>
<tr>
<td>Syphilis</td>
<td>≥ 15 years OR &lt; 15 with 1 of the following:</td>
</tr>
<tr>
<td></td>
<td>- Signs/symptoms of syphilis</td>
</tr>
<tr>
<td></td>
<td>- Hx of unprotected sex, pregnancy</td>
</tr>
<tr>
<td></td>
<td>- Hx of another STI</td>
</tr>
<tr>
<td></td>
<td>- Hx of syphilitic mother</td>
</tr>
<tr>
<td>HIV</td>
<td>≥ 15 years OR &lt;15 with 1 of the following:</td>
</tr>
<tr>
<td></td>
<td>- Signs and symptoms of HIV</td>
</tr>
<tr>
<td></td>
<td>- Hx of unprotected sex, pregnancy</td>
</tr>
<tr>
<td></td>
<td>- Hx of another STI</td>
</tr>
<tr>
<td></td>
<td>- Hx of sharing needles, or IV drug equipment</td>
</tr>
<tr>
<td></td>
<td>- Hx of unsafe injections, unsterile medical procedures, transfusions</td>
</tr>
<tr>
<td></td>
<td>- Hx needle stick injury</td>
</tr>
<tr>
<td></td>
<td>- Suspected active TB, Hep B/C</td>
</tr>
<tr>
<td></td>
<td>- Tattooing, piercing or having received acupuncture</td>
</tr>
<tr>
<td></td>
<td>- Hx of HIV positive mother</td>
</tr>
<tr>
<td></td>
<td>- Any child showing failure to thrive</td>
</tr>
</tbody>
</table>

Upon completion, a grade is assigned to each IME report indicating whether any abnormalities were found. (Table 2)

Table 2: IME grading

<table>
<thead>
<tr>
<th>Grade</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>No abnormal findings present and no significant abnormal history</td>
</tr>
<tr>
<td>B</td>
<td>Significant abnormal findings on history or physical</td>
</tr>
</tbody>
</table>

The IME report is then submitted, either electronically or by paper, and further assessed based on the findings. For sample history, physical and lab requisition forms please visit the following website, Appendix III: [http://www.cic.gc.ca/english/resources/publications/dmp-handbook/index.asp#app3](http://www.cic.gc.ca/english/resources/publications/dmp-handbook/index.asp#app3)

References


**Back to Table of Contents**
Primary Care Considerations
Written By: Dr. Stephanie Cargnelli

Introduction

Despite having an initial health screening as part of the immigration process, a thorough history and physical exam needs to be conducted at the initial visit. Traditionally, preliminary assessments have been targeted at detecting infectious diseases, while little attention is given to chronic diseases and preventative care\(^1\). Refugees are the immigrant population that faces the most significant health risks because of their exposure to harmful living conditions, violence, and poor access to primary care and preventive services\(^2\). Furthermore, they are at considerable risk for rapid decline in their health upon arrival to Canada\(^3\). As such, primary care is of utmost importance for incoming refugees.

The initial history for a Syrian refugee is not unlike the history that would be conducted for a new patient entering your practice. It is important to address current medical concerns, past medical history (including episodes of severe illness), surgical history, medications (traditional and herbal), and family history. However, there are some refugee-specific considerations that need to be addressed. Be mindful of the fact that many incoming refugees possess limited language skills and may require an interpreter to conduct a history. The following highlights some historical elements needed to provide optimal care to incoming refugees.

Psychosocial Elements

A travel history, including country of birth and all places traveled and lived in prior to immigrating to Canada, provides valuable insight into the care needs of new refugees. This information allows caregivers to identify likely exposures to infections and diseases\(^4\). It is also important to ask about time spent in refugee camps, type and quality of medical care accessed prior to immigration, and exposure to violence, trauma, and poor living conditions. Inquiring about current living conditions provides information about social supports, family structure, and safety\(^4\).

Taking a thorough occupational history includes inquiring about previous employment in addition to any current employment. The Agency for Technical Cooperation and Development conducted a survey that indicated that the majority of Syrians worked in construction and agriculture\(^5\). A complete occupational history helps to determine any significant chemical or environmental exposures. It also provides insight into some of the skills possessed by refugee patients. Similarly, a history would not be complete without inquiring about education and literacy. This allows medical information to be delivered at the appropriate level to facilitate understanding and compliance.

Nutrition and Growth

Malnutrition is common among refugees, particularly those who have spent time in refugee camps. This is due both to limited access to nutrition as well as chronic diseases such as chronic diarrhea. Rations provided to refugees are intended to meet energy
requirements but not the requirements for essential micronutrients. It is important to conduct a thorough dietary history including dietary restrictions, access to fruits, vegetables, and meat, previous supplement intake, and periods of food insecurity.

Iron deficiency anemia is the most common nutritional deficiency worldwide and is of particular importance in the incoming refugee population. A number of factors contribute to the high prevalence of iron deficiency anemia in this population, including lack of bioavailable iron in the diet, diets high in inhibitors of iron absorption (tannins in tea, phytates from plants), parasitic infections, and chronic disease. The subsets of the population most at risk for iron deficiency anemia are infants and children, particularly those who have been exclusively breastfed after six months, and women of childbearing age. In fact, approximately 75% of Syrian refugee children from six to thirty-five months of age are anemic. Iron deficiency anemia has the potential to cause poor pregnancy outcomes including preterm delivery and poor neonatal health, as well as impaired cognitive and physical development in children. While particularly important to screen these subsets of the population, screening in all refugees with suspected iron deficiency anemia is essential to ensure prompt initiation of therapy. Other micronutrient deficiencies present among refugees include vitamin D, vitamin A, zinc, vitamin B12, vitamin B3, iodine, thiamine, and vitamin C. It is imperative to conduct a thorough physical exam at the initial visit to assess for the physical manifestations of these deficiencies including visual impairment, goiter, neurological abnormalities, and growth retardation. A growth chart should be plotted for all incoming children and a BMI should be calculated for refugees of all ages in order to assess initial nutritional status and ensure appropriate weight gain and growth.

While the initial priority of most physicians will be to address the issue of malnutrition, obesity is a growing concern among refugee populations. A study conducted in Rhode Island of paediatric refugees found that the prevalence of obesity increased from 17.3% at the time of arrival to 35.4% three years after settlement. This increase in body weight following immigration is in large part related to dietary changes. Many barriers exist for refugees to obtain nutritious food including cost, availability, and knowledge of the nutritional value of specific foods. Instead, low cost, high calorie foods tend to be a more feasible, attainable option. In addition, refugees have a tendency to be less physically active following immigration. This weight gain predisposes refugees to a number of chronic diseases including hypertension, diabetes, heart disease, and cancer. As such, diet and exercise counselling are essential for incoming refugees.

A number of other considerations for the primary health visit including chronic diseases, infectious diseases, vaccinations, mental health, and women’s health are covered in more detail in other sections.

Primary Care Template

The attached template is an evidence based preventive care checklist, including physical exam, for new immigrants and refugees from the Middle East. It was developed by the Canadian Collaboration for Immigrant and Refugee Health (CCIRH), the University of Ottawa Faculty of Medicine and Bruyere Continuing Care. The authors of this article were not involved in the development of this template - all credit should be given to the CCIRH, the University of Ottawa Faculty of Medicine and Bruyere Continuing Care.
Link to the online version of the template can be found here:
### 1st Visit

<table>
<thead>
<tr>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ht:</td>
</tr>
<tr>
<td>Wt:</td>
</tr>
<tr>
<td>BP:</td>
</tr>
</tbody>
</table>

### Vital Signs

<table>
<thead>
<tr>
<th>Orientation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinic appointments and health system</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Health History</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Allergies, Current meds</td>
<td></td>
</tr>
<tr>
<td>Previous illness</td>
<td></td>
</tr>
<tr>
<td>Immunization status</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Psychosocial Assessment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Past education:</td>
<td></td>
</tr>
<tr>
<td>Past occupation(s):</td>
<td></td>
</tr>
<tr>
<td>Current housing:</td>
<td></td>
</tr>
<tr>
<td>Migration/Displacement History:</td>
<td></td>
</tr>
<tr>
<td>Remain alert to possible PTSD but do not routinely screen for history of trauma</td>
<td></td>
</tr>
<tr>
<td>If linked to integrated program:</td>
<td></td>
</tr>
<tr>
<td>Depression Screen</td>
<td></td>
</tr>
<tr>
<td>Document date of refugee claimant's hearing</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition screening &amp; counseling (programs to promote breastfeeding)</td>
<td></td>
</tr>
<tr>
<td>Exercise programs to prevent obesity (active living)</td>
<td></td>
</tr>
<tr>
<td>Screen for Unmet Contraceptive Needs/ Emergency Contraception</td>
<td></td>
</tr>
<tr>
<td>Home visitation for high risk mothers (infant &lt;3)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical Exam</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Focused examination to address patient's presenting complaint</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Problems/Plan</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan and book follow-up visit</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Screening Investigations</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mantoux Skin Test (TST)*</td>
<td></td>
</tr>
<tr>
<td>CBC with differential (children/females)</td>
<td></td>
</tr>
<tr>
<td>Hep B (sag/uhb/cab)*</td>
<td></td>
</tr>
<tr>
<td>Serology for Varicella*</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Immunizations*</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Children (Age Dependent):</td>
<td></td>
</tr>
<tr>
<td>DPT-AP</td>
<td></td>
</tr>
<tr>
<td>HPV</td>
<td></td>
</tr>
<tr>
<td>DPT</td>
<td></td>
</tr>
<tr>
<td>Varicella</td>
<td></td>
</tr>
<tr>
<td>Adults:</td>
<td></td>
</tr>
<tr>
<td>MMR</td>
<td></td>
</tr>
<tr>
<td>Varicella</td>
<td></td>
</tr>
<tr>
<td>MMR</td>
<td></td>
</tr>
</tbody>
</table>
### 2nd Visit (2-7 days)

**Date:**

<table>
<thead>
<tr>
<th>Vital Signs</th>
<th>Wt:</th>
<th>BP:</th>
</tr>
</thead>
</table>

**Patient Health Concerns**
Address reason for visit
Patient-centered approach

<table>
<thead>
<tr>
<th>Physical Exam</th>
<th>Important signs in immigrants from developing countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screen Visual Acuity</td>
<td>Nutritional status, fevers, scars/skin lesions, clubbing, wheezes, heart murmur, lymphadenopathy, organomegaly, limb weakness</td>
</tr>
<tr>
<td>Dental Mouth Exam</td>
<td></td>
</tr>
</tbody>
</table>

**Problems/Plan**
- **NSAIDs for Dental Pain and Refer for Dental Pathology/Pain**
- **Fasting Glucose (>35)**
- **Chest X-ray if Mantoux test >10 mm**
- **Screen for obesity**
- **LDL/Cholesterol (men >35, women >45)**
- ** Remain alert for isolation for pregnant women**

### 3rd Visit (1-3 months)

**Date:**

<table>
<thead>
<tr>
<th>Vital Signs</th>
<th>Wt:</th>
<th>BP:</th>
</tr>
</thead>
</table>

**Patient Health Concerns**
Address reason for visit
Patient-centered approach

| Orientation | Verify links to local resources (e.g., libraries, local events) |

**Psychosocial Assessment**
- **Refer to local mental health services**
- **Remain alert for possible onset of depression**

<table>
<thead>
<tr>
<th>Education</th>
<th>Diet counseling (iron Deficiency and Diabetes)</th>
<th>Positive Parenting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dental Care (tooth brushing)</td>
<td>Exercise</td>
</tr>
<tr>
<td></td>
<td>Adequate Vitamin D</td>
<td>Assess for Smoking and Alcohol misuse</td>
</tr>
</tbody>
</table>

**Physical Exam**
Important signs in immigrants from developing countries
- **Ensure appropriate clothing for weather (cold and sun)**

**Problems and Plan**
- **Refer if positive for Hepatitis B**

<table>
<thead>
<tr>
<th>Screening Investigations</th>
<th>Consider testing for chlamydia; GC, syphilis (VDRL)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mammmography (50-75)</td>
</tr>
<tr>
<td></td>
<td>Rectal occult Blood (&gt;50)</td>
</tr>
<tr>
<td></td>
<td>Osteoporosis screening (women &gt;65)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Immunizations</th>
<th>Hepatitis B (non-immune)</th>
<th>Varicella (non-immune)</th>
<th>HPV vaccination (for 9-25 year old females)</th>
</tr>
</thead>
</table>
Tuberculosis Screening: Tuberculin skin test (TST)

Indications for TST: persons at high risk for disease
- Contact with contagious TB patients, immunocompromised especially on TB endemic country within 5 years of arrival
- Increased risk of reaction due to impaired immunity; HIV/AIDS, Diabetes, Renal Failure, Corticosteroids or other immunosuppressant drugs

INH Treatment of Latent Tuberculosis Infection
(active disease ruled out)
- Isoniazid 300mg OD (children 5mg/kg); consider pyridoxine 25-50mg OD to prevent neuropathy in malnourished states
- Provide 9 months of INH for all adults
- Consider up to 12 months in children

Canadian criteria for a positive TST

High risk people: Symptom
- HIV, Contact with active TB, signs of active TB on CXR, organ transplant steroids >15mg/day

High risk conditions: 10mm
- Silicosis, DM, Chronic Renal Failure, Leukemia, Lymphoma, Malnutrition, c/HIV, 5 years of age

High Prevalence: Population "10mm
- Foreign born high prevalence countries: see Greenaway et al. TB in CMAJ 2011 aimed at 5 years, health care worker, abandoned, prisoners, homeless, urban poor

*Risk of INH hepatotoxicity (AET) 5 times normal
- Age
  - 25-34: 4/1000
  - 35-49: 8/1000
  - 50+: 19/1000

Monitored (i.e. AST at 3 weeks and Q 3 months) is required for those over 50 years of age and those with pre-existing liver disease, alcoholism or concomitant use of hepatotoxic drugs.

Immunizations: Needed for primary prevention particularly for travel to country of origin. Pneumovax, tetanus, Hepatitis B, Varicella and a series of primary series: MMR, DTAP

Consider: Also consider Hepatitis A for all immigrants and refugees and Pneumococcal and H influenza for sickle cell disease

- 92% of congenital Rubella syndrome in Canada in foreign born (FB)
- Large proportion of FB involved in Rubella and Varicella outbreaks
- Most recent Tetanus in the FB
- WHO Expanded Program of Immunization (EPI) program began in 1974 so many FB adults not covered this program does not routinely provide Rubella

Visiting Friends and Relatives (VFR) Travel pre-travel planning for future travel home

See travel health website: www.travelhealth.gc.ca

Consider: Fever, Meningococci, Typhoid vaccines, prophylaxis for malaria. Counseling for Mosquito avoidance, DEET repellent, and bed nets

Sex Transmitted Disease and motor vehicle accident prevention: seat belts, alcohol in moderation

Antibiotics for severe diarrhea 60 mg (Amoxicillin 100mg once)

Summary of health information

Laboratory investigations:
- Basic Tonses of Screening: suitable test and facilities to diagnose available, accepted treatment available, recognized latent or asymptomatic disease, staging, diagnosis and treatment should be cost effective.
- Consider periodic screening for infectious disease and chronic illness tailored to history of travel and lifestyle

Special Laboratory investigations to Consider
- Malaria: Rapid Diagnostic Test (RDT), thick & thin smears when fever within 3 months of travel to Malaria zone
- Other: Many cases of malaria occur in immigrants from developing countries, both on migration or after traveling home

Working with an interpreter

- Pre-interview: Discuss with the interpreter goal of the interview, emphasize confidentiality, and seating arrangements
- Interview: Speak to patient not to the interpreter - ensures patient faces physician when interpreter speaks, explain the interpreter’s role, and frequently remark back to patient what you hear
- End of the interview: Repeat important concepts, review treatment plan carefully, have patient repeat back general diagnosis and plan

Global Health Risks
- Tuberculosis, Malaria, HIV/AIDS, Hepatitis A, B, C, Typhoid, Measles, Intestinal Parasites, Rheumatic Heart Disease, undiagnosed chronic conditions, Trauma and Violence, Rape, Torture
- Malnutrition and Micronutrient deficiency: iron, folate, iodine (some regions), Thalassemia (Africa, Middle East, Sickle cell (Africa, Caribbean), microcytic anemia, replace iron and then do high electrolytes

Treatment of common asymptomatic intestinal worms and parasites

- **Doses** are same for children unless noted by asterisk
- ****not available in Canada

<table>
<thead>
<tr>
<th>Intestinal worm or parasite</th>
<th>Primary treatment</th>
<th>Alternative treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entamoeba histolytica</td>
<td>Metronidazole 750mg t.i.d</td>
<td>Metronidazole 750mg t.i.d</td>
</tr>
<tr>
<td>(prolonged therapy or stool antigens)</td>
<td>Tindazole</td>
<td>Tindazole</td>
</tr>
<tr>
<td>Giardia lamblia</td>
<td>Metronidazole 250mg p.o. t.i.d.</td>
<td>Metronidazole 100mg b.i.d.</td>
</tr>
<tr>
<td>Ascaris lumbricoides</td>
<td>Albenza 400mg p.o. t.i.d.</td>
<td>Albenza 400mg p.o. t.i.d.</td>
</tr>
<tr>
<td>Enterobias vermicularis</td>
<td>Albenza 400mg p.o. t.i.d.</td>
<td>Albenza 400mg p.o. t.i.d.</td>
</tr>
<tr>
<td>Strongyloides stercoralis</td>
<td>Thiabendazole 50mg/kg divided bid t.i.d.</td>
<td>Thiabendazole 50mg/kg divided bid t.i.d.</td>
</tr>
<tr>
<td>Schistosoma mansoni, haematobium</td>
<td>Praziquantel 40mg/kg div. bid t.i.d.</td>
<td>Praziquantel 40mg/kg div. bid t.i.d.</td>
</tr>
<tr>
<td>Trichuris trichiura</td>
<td>Albenza 400mg p.o. t.i.d.</td>
<td>Albenza 400mg p.o. t.i.d.</td>
</tr>
</tbody>
</table>

Resources:
7. Additional resources and information for clinicians, Bridge Refuge Clinic, Vancouver Coastal Health: www.refugeeshealth.ca

Disclaimer:given the constantly evolving nature of evidence and changing recommendations, the CCHR preventive checklist is meant as a guide only

Fair Use Authorization: See cccirh.ca
References


Although considerable attention is often given to communicable diseases in refugee populations, **chronic disease, such as hypertension and diabetes, are also prevalent and may have a considerable impact on the health of newcomers** to Canada. In the November 2015 population profile of Syrian refugees prepared by Citizenship and Immigration Canada, the **two most commonly identified chronic diseases in Syrian refugees at time of immigration were hypertension and diabetes**, with the prevalence of hypertension 7.6% and diabetes 2.2% \(^1\). These numbers are likely to increase as refugees are prone to weight gain following settlement\(^2\). Other chronic diseases found in Syrian refugees resettled to Canada (taken from Department’s immigration medical exam) are recorded below in Table 1.

<table>
<thead>
<tr>
<th>Chronic Disease</th>
<th>Proportion of Syrian Refugee Group (%) (n=1,439)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypertension</td>
<td>7.6</td>
</tr>
<tr>
<td>Non-specific abnormal findings*</td>
<td>5.0</td>
</tr>
<tr>
<td>Diabetes</td>
<td>2.2</td>
</tr>
<tr>
<td>Visual or hearing impairment</td>
<td>1.5</td>
</tr>
<tr>
<td>Cardiovascular disease</td>
<td>0.9</td>
</tr>
<tr>
<td>Cognitive/behaviour/nervous system disorder</td>
<td>0.8</td>
</tr>
<tr>
<td>Mental illness/mood disorder</td>
<td>0.8</td>
</tr>
<tr>
<td>Cancer</td>
<td>0.6</td>
</tr>
<tr>
<td>Other</td>
<td>0.5</td>
</tr>
<tr>
<td>Communicable disease</td>
<td>0.4</td>
</tr>
<tr>
<td>Osteoarthritis</td>
<td>0.3</td>
</tr>
<tr>
<td>Renal disorder</td>
<td>0.3</td>
</tr>
</tbody>
</table>

*Non-specific abnormal findings relate to medical findings during the medical assessment that were inconclusive or not related to any specific health condition

**Table 1: Proportion of health conditions among resettled Syrian refugees**  
(adapted from Population Profile: Syrian Refugees, Citizenship and Immigration Canada\(^1\))

These prevalence rates are low compared to other studies that have explored rates of hypertension and diabetes in newly arrived refugees. Various studies exploring the prevalence of hypertension in newly arrived refugees in the United States and Canada show prevalence rates ranging from 13.3-42\(^3\)\(^,\)\(^4\)\(^,\)\(^5\)\(^,\)\(^6\). Rates of diabetes range from 3.1-15.5\(^3\)\(^,\)\(^4\)\(^,\)\(^5\)\(^,\)\(^6\). These numbers are not specific to Syrian refugees, but are compatible with prevalence rates in Syria itself. A 2012 study conducted in Syria among non-refugees found the prevalence of hypertension to be 20.1%, and the prevalence of diabetes to be 19.8\(^7\). These rates are comparable or higher than the rates of hypertension and diabetes found in the general Canadian population with hypertension at 17.7\(^8\) and diabetes at 6.8\(^9\) respectively.
Both hypertension and diabetes are important chronic diseases to screen and monitor in refugee populations, both because of their high prevalence but also as a result of their long-term impact on health. It is well known that hypertension represents a significant risk for cardiovascular disease and globally hypertension is directly responsible for 45% of deaths due to heart disease and 51% of deaths due to stroke\(^\text{10}\). Although hypertension and cardiovascular disease are often considered diseases of high-income countries, the burden of deaths due to cardiovascular disease is actually borne by low- and middle-income countries\(^\text{10}\). It is important therefore not to ignore the presence of hypertension in individuals from these countries and to be vigilant in screening as per the Canadian Task Force guidelines\(^\text{11}\). Diabetes also carries significant long-term implications for health and death. Complications of diabetes include cardiovascular disease, vision loss/blindness, kidney failure, nerve damage, pregnancy complications, oral disease and depression\(^\text{12}\). People with diabetes are more likely to die prematurely than people without diabetes in every age group\(^\text{12}\). The CMAJ guidelines suggest screening immigrants and refugees > 35 years of age from ethnic groups at high risk for type 2 diabetes (South Asian, Latin American and African) with fasting blood glucose\(^\text{13}\).

While both hypertension and diabetes have a high prevalence in refugee and non-refugee populations, refugee populations have unique factors that may exacerbate these conditions and complicate their treatment. One such factor is the presence of mental health disorders. There is growing understanding of the association between mental health and chronic disease\(^\text{14,15}\). A study of Cambodian refugees in the US demonstrated higher rates of chronic disease in refugees with Post-Traumatic Stress Disorder (PTSD) and depression compared to those without these mental health diagnoses, regardless of age\(^\text{15}\). Comorbid PTSD and depression was found to lead to higher rates of disability in Bosnian refugees\(^\text{16}\). Given that high rates of mental health disorders have been reported among Syrian refugees\(^\text{17}\), this may increase both the prevalence and severity of chronic disease in this population.

Another exacerbating factor is the fact that many refugees will have been without access to primary care and pharmaceuticals for a length of time before arriving in Canada\(^\text{18}\). This has the potential to result in greater incidence of end-organ disease and complications\(^\text{18}\). Finally, both management of hypertension and diabetes may be complicated by poor health literacy and an alternative perspective/approach to health and illness\(^\text{18,19,20}\). For example, many individuals may find the concept of a chronic disease with ongoing treatment foreign\(^\text{18,19}\). Different sources describe refugees needing guidance in order to understand the concept of a medication refill, as these individuals may think that once a medication has run out, the disease has been effectively treated\(^\text{18,19}\).

In summary, it is important not to ignore the impact of chronic disease on refugee populations, given both the high prevalence of these conditions and their significant impact on morbidity and mortality. Primary care providers need to be cognizant that these common conditions do present in refugee populations at rates comparable or higher than the general Canadian population and that there are multiple unique challenges when treating these diseases in the refugee population.
Bottom Line:

- Diabetes and Hypertension are important chronic diseases that should not be missed in refugee populations
- Screen refugees > 35 years of age from ethnic groups at high risk for type 2 diabetes (South Asian, Latin American and African) with fasting blood glucose.
- Screen refugee patients for hypertension in keeping with the Canadian Task Force guidelines (screen all patients for hypertension over the age of 18).
- Chronic diseases and their management can be affected by various factors, including mental health disorders, lack of access to pharmaceuticals and primary care, and poor health literacy.
- It is important to keep these factors in mind when discussing chronic disease management with patients.

References


Preventative Interventions and Chronic Disease Considerations
Written By: Dr. James Heywood

Preventive Interventions:

- **Do not routinely screen for trauma** but watch for signs of PTSD/depression/anxiety disorders.
- **Vaccinate** all children and adults **without records** of complete vaccination. (MMR, diphtheria, tetanus, pertussis, H.influenzae B and polio). **Titres not required** prior to vaccinating.
- Do **not** test for latent TB, as incidence remains low in Middle East Region.
- **Screen** all children and adults **for chronic HBV** infection or prior immunity. **Vaccinate** those who are **susceptible**.
- Consider varicella serology and vaccination if susceptible – many Syrians are likely immune to varicella.
- Consider HCV screening – prevalence historically low in Syrians, but may have increased as a result of war.
- Consider serology for intestinal parasite Strongyloides, but do not collect stool sample unless abdominal symptoms are present.

Chronic Diseases:

- **Screen for anemia** with CBC in women and children (high prevalence in refugees).
- Remain alert for interrupted treatments for diseases, such as hypertension and diabetes.
- A study looking at non-communicable diseases (NCD’s) in Syrian refugees in Jordan found that 50% of households reported a member with a NCD, such as hypertension, arthritis, diabetes, cardiovascular disease, and chronic respiratory diseases.
- ~85% of refugees with NCD’s sought care in the above-mentioned study, with those that didn’t citing cost as the primary barrier.


References


**Back to Table of Contents**
Immunizations
Written By: Priscilla Yung, Jessica Shanahan and Dr. Balal Lone

The above graphic directly compares Ontario’s immunization schedule with that of the Syrian Arab Republic. The following is a summary of the available guidelines on immunizations for newcomers to Canada.

General Considerations:

Determining whether a newcomer to Canada is up-to-date with immunizations is a unique challenge, as accurate and reliable information is not always available. Moreover, differences exist in publicly administered vaccination schedules from country to country. Furthermore, immunization status is not confirmed nor updated during the immigration process.
medical examination\textsuperscript{1}. Thus, health care providers should not assume that newcomers are completely immunized per the Canadian schedule\textsuperscript{1}.

Health care providers should not rely on parental recall of child’s immunization status or illness history. Instead, only accept written documentation for evidence of previous immunizations, if the following criteria are consistent with current guidelines: vaccine type, number of doses, intervals between doses, and age of patient at time of immunization\textsuperscript{1}. Even then, the written documentation should be used cautiously. Studies have shown that children who have written immunization records are more likely to have seroprotection than those who do not have written records. However, there is poor agreement between number of doses and likelihood of immunity\textsuperscript{1,2}.

Prior to the current conflict in Syria, childhood vaccination coverage was over 90\%\textsuperscript{3}. However, the most recent data demonstrates that only 43\% of Syrian refugee children have received their primary series of diphtheria-pertussis-tetanus vaccine and only 52\% have received the polio vaccine\textsuperscript{3}. Thus, the CCIRH guidelines and Canadian Immunization Guide both recommend offering age-appropriate publicly funded vaccinations to newcomer children with missing immunization records\textsuperscript{3}.

Remember to create appropriate catch-up schedules for children who are unimmunized or under-immunized. For complex cases, an immunization expert from the local public health agency can help you design an appropriate catch-up schedule\textsuperscript{1}. According to current recommendations, some newcomer children may require up to 6 vaccinations at their first catch-up visit\textsuperscript{1}. There is no maximum number of vaccines that can be given at any single visit. Remind families to bring their Canadian vaccination record with them to all appointments to facilitate immunization catch-up\textsuperscript{1}.

**Measles, Mumps, Rubella**

Mumps and rubella are not part of routine vaccination programs in most source countries for newcomers to Canada\textsuperscript{4}. Moreover, upwards of 20 – 30 \% of adult immigrants may be susceptible to rubella and may be at risk for having a child with congenital rubella syndrome\textsuperscript{4}. Lastly, childhood vaccination programs have significantly decreased the incidence of and associated mortality of measles, mumps, rubella, and congenital rubella syndrome\textsuperscript{4}. In the World Health Organization schedule, the measles vaccine (without mumps or rubella components) is given at 9 – 12 months of age\textsuperscript{1}. In the Canadian schedule, doses given before 12 months of age are generally not considered as valid and should be followed up with two doses after 12 months of age\textsuperscript{1}.

**Therefore, the Canadian Collaboration for Immigrant and Refugee Health (CCIRH) Guidelines indicate the following\textsuperscript{4}:**

- Vaccinate all newcomer adults without immunization records using one dose of measles-mumps-rubella vaccine.
- Vaccinate all newcomer children with missing or uncertain vaccination records using age-appropriate vaccination for measles, mumps, and rubella\textsuperscript{4}.

**Diphtheria, Pertussis, Tetanus, and Polio**

Up to 50\% of newcomer adults may be susceptible to tetanus and up to 60\% are susceptible to diphtheria\textsuperscript{4}. The proportion susceptible to both tetanus and diphtheria increases with age\textsuperscript{4}. As is the case with MMR vaccinations decreasing the incidence of and mortality of measles, mumps, and rubella, similar results have been seen with the administration of childhood DTap-IPV vaccines\textsuperscript{4}.
Therefore, the Canadian Collaboration for Immigrant and Refugee Health (CCIRH) Guidelines indicate the following:

- Vaccinate all newcomer adults without immunization records using a primary series (three doses) of diphtheria, tetanus, and inactivated polio vaccine
  - The first dose should include acellular pertussis vaccine in order to also protect against pertussis
- Vaccinate all newcomer children with missing or uncertain vaccination records using age-appropriate vaccination for diphtheria, pertussis, tetanus, and polio.

**Varicella**

Varicella occurs at older ages in tropical countries, with mean age of onset at 15 years of age, than it does in temperate and cooler countries (mean age of onset at 5 years of age). Moreover, many tropical countries do not have varicella vaccination programs. As a result, up to 50% of adolescents and up to 10% of adults from tropical countries are susceptible to varicella and are at increased risk of severe varicella disease. The risk of developing severe varicella is further exacerbated by the fact that no systematic catch-up varicella vaccination schedules exist for newcomers.

Therefore, the Canadian Collaboration for Immigrant and Refugee Health (CCIRH) Guidelines indicate the following:

- Ensure that immigrants and refugees of all ages are immune to varicella.
- Vaccinate all newcomer children < 13 years of age with varicella vaccine. No prior serological testing is required.
- Screen all immigrants and refugees from tropical countries 13 years of age or older for serum varicella antibodies.
  - Vaccinate those found to be susceptible.

**Hepatitis B (HBV)**

Hepatitis B viral infection is an important global health problem and can lead to chronic liver disease and hepatocellular carcinoma. In Ontario, the HBV vaccine is publicly funded and is provided as part of the Grade 7 vaccination program. In countries where chronic HBV infection is endemic, universal perinatal and childhood vaccination programs have drastically decreased chronic HBV infection and decreased mortality from hepatocellular carcinoma. In countries with low prevalence of chronic HBV infection (ie, < 2% positive for HBV surface antigen), vaccination of adults decreases development of acute infections.

Therefore, the Canadian Collaboration for Immigrant and Refugee Health (CCIRH) Guidelines indicate the following:

- Screen adults and children from countries where the seroprevalence of chronic hepatitis B virus infection is moderate or high (ie, 2%+ positive for hepatitis B surface antigen) for prior immunity to hepatitis B virus
  - This involves checking anti-hepatitis B core antibody and anti-hepatitis B surface antibody
- Vaccinate those found to be susceptible to hepatitis B virus infection
  - Susceptibility is indicated by negative results for all three markers – hepatitis B surface antigen, anti-hepatitis B core antibody, and anti-hepatitis B surface antibody.
Useful Links & Resources

Canadian Pediatric Society – Immunizations: Bringing Newcomer Children Up-to-Date – http://www.kidsnewtocanada.ca/screening/immunizations


Visit www.ontario.ca/vaccines for most up to date vaccination information.

Centers for Disease Control and Prevention (CDC) – Vaccination Information Statements (available in various languages) – http://www.immunize.org/vis/vis_english.asp

References


Back to Table of Contents
Infectious Diseases
Written By: Dr. Laurel Laakso, Shan Leung, and Daegan Sit

Introduction

The Syrian Civil war began during the spring of 2011, disturbing 40 years of socio-political stability, including a robust medical system. Life expectancy was recorded to be 73.1 years in 2009 and the main cause of mortality was non-communicable diseases at 77%\(^1,2\). The current lack of medical infrastructure and vaccination programs, the displacement of millions of people to unsanitary and overcrowded areas, and the dearth of safe drinking water has increased concerns of communicable diseases\(^3,4\). Rates of vaccination were estimated to be as low as 45% in some regions in 2013, down from 91% in 2010. According to some reports, an estimated 50% of children born in Syria since the conflict began are unvaccinated\(^5,6\).

There are a number of communicable diseases that have emerged as potential threats to public health during the Syrian conflict\(^7,8\). Note that it is important to obtain a thorough travel history, including all locations the patient may have travelled through or lived in during their journey. Moreover, it is important to determine whether any time was spent in refugee camps. This information will help determine which pathogens the individual may have been exposed to during their journey.

For more information on specific diseases and other tropical diseases endemic to the Middle East, please visit the following resources:


Tropical Diseases of Syria and Syrian Refugee Camps

METHODOLOGY:

The diseases included in the following list were primarily determined using the monthly WHO Regional Situation Reports for the Syrian Arab Republic in the years 2012 – 2015. The diseases to include were secondarily determined by an online search of journel articles and news stories using the search terms “Syria”, “Syrian refugee”, “outbreak, disease” and “tropical”, and the CDC Health Information for Travelers to Syria and Turkey. Information on specific diseases was gathered using BMJ Best Practice as a primary resource and UpToDate, DynaMed Plus and STAT!Ref Smart Medicine as secondary resources. Please see the resource list below for specific resources that were used to generate the above disease list.

Below is a short list of tropical diseases of Syria and Syrian refugee camps. As per the World Health Organization (WHO) definition, tropical diseases are “infectious diseases that thrive in hot, humid conditions”. Particular attention has been paid to tropical diseases
that are common, severe and/or re-emerging in Syria and Syrian refugee camps. However, this list should not be considered an exhaustive one.

Please see Table 1 and Table 2 for a more detailed comparison of common infectious diseases endemic to Syria (compiled using: UptoDate, as well as the CDC and WHO websites).

1) Cutaneous leishmaniasis:
**Cause:** Infection by *Leishmania* protozoan parasite
**Route of infection:** Sand fly bites
**Incubation period:** Weeks to months

**Common signs and symptoms:**
- Chronic cutaneous lesions on exposed areas of skin (highly variable in appearance; most commonly, lesions form volcano-like ulcerations or non-ulcerative nodules)
- Immunosuppression
- Enlarged lymph nodes

**Common complications:**
- Bacterial superinfection of ulcerated lesions
- Disfigurement and later scarring

2) Hepatitis A:
**Cause:** Infection by hepatitis A virus
**Route of infection:** Oral-fecal
**Incubation period:** 15 – 49 days

**Signs and symptoms:**
- Abrupt onset of fatigue
- Abdominal pain, especially right upper quadrant pain
- Nausea
- Vomiting
- Anorexia
- Diarrhea
- Weight loss
- Malaise
- Myalgia
- Pruritus
- Symptoms of icteric disease

**Common Complications:**
- Liver failure

3) Typhoid fever:
**Cause:** Infection by *Salmonella enterica* serovar typhi bacterium
**Route of infection:** Oral-fecal
**Incubation period:** 5 - 21 days

**Common signs and symptoms:**
- High fever
- Dull frontal headache
Abdominal pain
Anorexia
Apathetic-lethargic state
Constipation
Cough
Diarrhea
Malaise
Nausea
Prostration

**Common complications:**
- Antimicrobial resistance
- Extra-intestinal manifestations

4) **Shigellosis:**
**Cause:** Infection by *Shigella* bacterium
**Route of infection:** Oral-fecal
**Incubation period:** 1 - 7 days
**Common signs and symptoms:**
- Bloody, mucoid diarrhea (initially watery and profuse)
- Cramping abdominal pain
- Generalized abdominal pain
- Abdominal tenderness
- Fever
- Tenesmus
- Signs of volume depletion
- Increased bowel sounds

**Common complications:**
- Metabolic abnormalities

5) **Cholera:**
**Cause:** Infection by *Vibrio cholerae* bacterium
**Route of infection:** Oral-fecal
**Incubation period:** several hours - 5 days
**Common signs and symptoms:**
- Copious watery diarrhea
- Evidence of volume depletion
- Vomiting

**Common complications:**
- Circulatory collapse
- Acute renal failure
- Severe hypokalemia
- Hypoglycemia
- Muscle cramps
Non Tropical Diseases of Syria and Syrian Refugee Camps

The following infectious diseases are not generally considered to be tropical, but have re-emerged in Syria and Syrian refugee camps:

- Polio
- Measles
- Mumps
- Pertussis
- Tuberculosis
- Brucellosis
- Rabies
- Scabies

Resource list:


<table>
<thead>
<tr>
<th>Disease</th>
<th>Pathogen</th>
<th>Incubation</th>
<th>Transmission</th>
<th>Clinical Presentation</th>
<th>Diagnosis</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cholera</td>
<td>Bacteria: <em>Vibrio cholerae</em></td>
<td>12 hours to 5 days</td>
<td>Fecal-oral</td>
<td>“Rice water” diarrhea, nausea/vomiting, dehydration</td>
<td>Stool culture, rapid diagnostic tests</td>
<td>Rapid high-volume rehydration, doxycycline</td>
</tr>
<tr>
<td>Typhoid</td>
<td>Bacteria: <em>Salmonella Typhi</em></td>
<td>5-21 days</td>
<td>Fecal-oral</td>
<td>Variable, sustained fever, fatigue, abdo pain, headache, anorexia, rose-coloured spot</td>
<td>Blood culture, serology</td>
<td>Fluoroquinolones, third generation cephalosporins</td>
</tr>
<tr>
<td>TB</td>
<td>Bacteria: <em>Mycobacterium tuberculosis</em></td>
<td>2-12 weeks for (+) test, highest risk for developing disease is first 2 yrs after infection</td>
<td>Droplet</td>
<td>Chronic cough, blood-tinged sputum, fever, night sweats, weight loss; extrapulmonary symptoms</td>
<td>Tuberculin skin test, IGRA (interferon-gamma release assays)</td>
<td>Isoniazid, rifampin, many others</td>
</tr>
<tr>
<td>Brucellosis</td>
<td>Bacteria: <em>Brucella</em></td>
<td>Variable, usually 2-4 weeks, can be longer than 2 months</td>
<td>Unpasteurized/ raw dairy products, inhalation, contact through mucous membranes/broken skin</td>
<td>Fever, sweats, malaise, anorexia, headache, pain in muscles, joint, and/or back, fatigue, persistent symptoms</td>
<td>Blood culture, gram stain</td>
<td>Doxycycline and rifampin</td>
</tr>
<tr>
<td>Malaria</td>
<td>Parasite: <em>Plasmodium species</em></td>
<td>12-35 days</td>
<td>Bite of an infected female <em>Anopheles</em> mosquito</td>
<td>Fever, chills, malaise, fatigue, diaphoresis, headache, cough, anorexia, nausea, vomiting, abdo pain, diarrhea, arthralgias, myalgias</td>
<td>Blood smear, rapid diagnostic tests</td>
<td>Chloroquine, artemisinin, atovaquone-proguanil, quinine-based regimens, mefloquine</td>
</tr>
<tr>
<td>Leishmaniasis</td>
<td>Parasite: <em>Leishmania</em></td>
<td>Variable, weeks to months</td>
<td>Bite of sand fly vector</td>
<td>Cutaneous leishmaniasis: papules, nodules, ulcers Visceral leishmaniasis: “Black fever”, malaise, fever, weight loss, and splenomegaly</td>
<td>Skin biopsy with histology &amp; culture, PCR</td>
<td>Azoles, miltefosine, amphotericin B, pentavalent antimonial drugs</td>
</tr>
</tbody>
</table>

*Table 1:* Bacterial and parasitic infections emerging in the Syrian crisis
<table>
<thead>
<tr>
<th>Disease</th>
<th>Pathogen</th>
<th>Incubation</th>
<th>Transmission</th>
<th>Clinical Presentation</th>
<th>Diagnosis</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dengue</td>
<td>Dengue viruses, members of the</td>
<td>4-10 days</td>
<td>Bite of an infected <em>Aedes aegypti</em> mosquito</td>
<td>High fever, headache, myalgias, arthralgias, nausea/vomiting, lymphadenopathy, rash</td>
<td>Mainly clinical, serology available to confirm infection</td>
<td>Supportive</td>
</tr>
<tr>
<td></td>
<td>family <em>Flaviviridae</em> genus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Flavivirus</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measles</td>
<td>Measles virus</td>
<td>6-19 days</td>
<td>Airborne, person-to-person contact</td>
<td>Fever, malaise, anorexia, followed by conjunctivitis, coryza, and cough, exanthema, Kopliks spots</td>
<td>Serology, isolation of measles virus in culture, reverse transcription polymerase chain reaction (RT-PCR)</td>
<td>Supportive</td>
</tr>
<tr>
<td>Polio</td>
<td>Poliovirus</td>
<td>3-35 days</td>
<td>Fecal-oral, pharyngeal spread during epidemics</td>
<td>Muscle weakness, quadriplegia, resp failure, bulbar involvement can produce dysphagia, dysarthria, and difficulty handling secretions</td>
<td>Cerebrospinal fluid (CSF) PCR, serology</td>
<td>Supportive, ventilators</td>
</tr>
<tr>
<td>Rabies</td>
<td><em>Lyssaviruses</em></td>
<td>Usually 2-12 weeks, can be years</td>
<td>Saliva from an infected animal bite</td>
<td>Prodrome: fever, chills, malaise, myalgias, weakness, fatigue, anorexia, sore throat, nausea/vomiting, headache; Encephalitic rabies: fever, hydrophobia, pharyngeal spasms, and hyperactivity, paralysis, coma and death; Paralytic rabies: ascending paralysis</td>
<td>Virus-specific immunofluorescent staining of skin biopsy specimens, isolation of virus from the saliva, detection of anti-rabies antibodies in serum or CSF</td>
<td>Rabies vaccine and rabies immunoglobulin post-exposure, palliative care when symptomatic and unvaccinated</td>
</tr>
<tr>
<td>MERS-CoV</td>
<td>MERS-CoV</td>
<td>Up to 14 days</td>
<td>Dromedary camels primary host, human-to-human transmission</td>
<td>Pneumonia, ARDS, AKI</td>
<td>WHO questionnaire, LRT and serum specimens for rRT-PCR</td>
<td>Experimental treatments available</td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>HAV</td>
<td>14-28 days</td>
<td>Fecal-oral</td>
<td>Fever, malaise, anorexia, diarrhea, nausea, abdo pain, dark-coloured urine, jaundice</td>
<td>Serum HAV IgM and IgG antibodies</td>
<td>Supportive</td>
</tr>
</tbody>
</table>

* Represents best clinical knowledge to date

**Table 2**: Viral infections emerging in the Syrian crisis
References


Back to Table of Contents
Mental Health Considerations
Written By: Dr. Balal Lone

General Considerations

Since its inception in March 2011, the Syrian conflict has displaced nearly half of the population, both to neighbouring countries and within Syria. The conflict has been particularly violent, with some individuals having suffered through hostage taking scenarios, continuous shelling and bombing, torture, murder of family members, rape, and sexual violence. These violent acts have been a source of distress amongst the displaced population and have had widespread effects on mental health and psychosocial wellbeing. Moreover, the effects have been compounded by the stress associated with displacement including poverty, inability to meet basic needs due to lack of resources, social isolation, and social tensions between refugees and host communities.1

With such profound effects on mental health, it is important for healthcare providers to be prepared to understand and manage the concerns of the incoming refugee population. With the Syrian population representing a highly diverse group in terms of religious, ethnic, linguistic, and socioeconomic backgrounds, it is important to understand the culture-specific signs of distress from those we are familiar with in North American culture.1 By doing so, healthcare providers can better communicate with the refugee population and better understand the mental health experiences of these patients.

It is also worth mentioning that as a group, immigrants and refugees are less likely to seek out mental health services in comparison to their Canadian-born counterparts.2 This apprehension is multifactorial in nature. For one, refugees may lack transportation or may fear the repercussions from taking time off work. Moreover, there may be cultural barriers, such as fear of stigmatization or fear that healthcare providers may not understand concerns due to cultural differences.2 Thus, it is important to establish a trusting relationship early and explore how culture and religion may play a role in the patient’s understanding of symptoms.

In summary, the incoming Syrian refugee population is at significant risk for having experienced various horrific acts of violence and psychosocial stressors. These exposures will certainly have had a significant impact on their overall mental well-being. When interacting with this diverse group, it is important for healthcare providers to explore and recognize how Syrian refugees may express emotional and psychological signs of distress.

Psychosocial Wellbeing

According to Kirmayer et. al, most immigrant and refugee patients with mental health problems present with physical complaints, which may lead to under recognition and under treatment of mental health disorders.2 Exploration of physical complaints, specifically when they do not correlate with the clinical picture, should prompt physicians to consider mental health conditions. Patients are often reluctant to report emotional and mental distress due to stigmas attached to mental health illness and the belief that such topics are inappropriate topics for medical attention. Thus, it is important to directly
inquire about daily routines, sources of stress, social support networks, and family and/or work life.

Psychosocial distress may present through a variety of emotional, cognitive, physical, and behavioural problems.\(^1\)

**Emotional** – Symptoms may include sadness, grief, fear, frustration, anxiety, anger, and despair.

**Cognitive** – Symptoms may include helplessness, worry, ruminating thoughts, hopelessness, feelings of losing control.

**Physical** – Symptoms may include fatigue, insomnia or other sleep disturbances, loss of appetite, and vague medically unexplained somatic symptoms (i.e., chronic headaches, chronic abdominal cramps).

**Social** – Symptoms may include social withdrawal, aggression, and interpersonal difficulties.

It is important to note that these symptoms may not necessarily represent a mental health illness. Refugees may experience these symptoms as a result of their exposure to violence, their displacement, and the dissolution of their social supports. As such, prior to diagnosing a mental health illness, consideration should be given to whether their symptoms constitute a normal grief response. Moreover, the impact that this distress has on their daily functioning should be considered.\(^1\).

**Coping with Psychosocial Distress**

The conflict and resulting displacement has disrupted the social support structures for many Syrian refugee families. In the absence of these supports, many Syrian refugees employ both positive and negative coping strategies to manage psychosocial distress. Some of the more commonly used strategies among the Syrian population include praying or engaging in social activities.\(^1\) However, as refugees become increasingly hopeless, many may resort to negative coping strategies including social withdrawal, violence, smoking, substance use, and rumination. Cultural norms and expectations often dictate reactions to distress. Practitioners may see that males in particular carry forward the notion that emotional expressions of distress represent weakness.\(^1\)

In adolescents, withdrawal is a common coping mechanism. Encouraging communication and assisting with access to social supports may be beneficial. Substance use and violence are detrimental coping mechanisms that need to be screened for and addressed. It is often difficult for adolescents to communicate with their loved ones, including parents, for fear of causing further distress in an already difficult situation. As stress and suffering from war increases in parents, adolescents may feel less comfortable sharing their emotional hardship with parents due to fear of overburdening them.\(^1\)

**Culture specific idioms of distress**

*Cultural idioms of distress* are common means of expressing distress within a culture and are employed to communicate a wide variety of problems, conditions, or concerns. Understanding these idioms will allow for better communication and ultimately, a better therapeutic relationship.\(^1\)
In Syria, the terms “psychological state” or “mental health” are not well understood and often carry negative connotations. As such, people in distress may use indirect expressions to convey an overall feeling of being unwell. For example, a person may use *ana ta’ban* ('I am tired') or a feeling of 'heaviness in the heart' to express general distress\(^1\).

Most Syrian idioms do not separate somatic experiences from psychological symptoms, as the two are seen as interlinked concepts. Many may use metaphors or proverbs that assume the interconnectedness of mind and body\(^1\). Therefore, it is necessary to analyze these statements and understand the meaning of the statement in the context of the individual patient, as the literal translation is often not the intended meaning.

Some examples of common phrases\(^1\):

- **Habat qalbi** or **houbout el qalb** → “Falling or crumbling of the heart”
  - The somatic reaction to sudden fear
- **Kamatni kalbi** (my heart is squeezing) or **atlan ham** (I am carrying worry)
  - Refers to anticipated anxiety and worry
- **Asabi** – refers to feeling “nervous”
  - Can also refer to being irritated, angry or tense, and getting upset over little things
- **Al ayn bassira wal yadd kassira** – “The eyes can see but the hand cannot reach”
  - Refers to distress over resources and financial hardships
- **Expressions of helplessness**
  - **Mafi natija** – “There is no use”
  - **Hasis hali mashlool** – “I feel like I am paralyzed”
  - **Mou tali bi’idi shi** – “Nothing is coming out of my hands”
- **Qalb maqbout** – “Squeezed heart”
- **In’ama ’ala kalbi** – ”Blindness got to my heart”
  - These idioms refer to feelings of sadness and pessimistic feelings.

For more examples of common expressions of distress in Syrian Arabic and in the Kurdish language, please refer to pages 25 and 26 of the UNHCR document cited on the last page of this section.

**Suicidality**

In general, suicide and suicide attempts are stigmatized in Syrian culture and can lead to social exclusion\(^1\). Thus, such thoughts or attempts may not be readily revealed. Instead, indirect expressions may be used to indicate suicidal ideations including, **itmana nam ma fik** which translates to "I wish I could sleep and not wake up.”\(^1\)

It is very important to establish a strong therapeutic alliance and to inquire about specific sources of distress, before asking about suicidal ideations.

**Depression**

As in other populations affected by violence and displacement, emotional disorders, including depression, are significant medical problems\(^1\). However, depression is often under diagnosed and inadequately treated in refugee populations due to barriers to mental health care, not the least of which include cultural and linguistic barriers\(^3\).
In the Syrian refugee population, depression may be referred to as *al-hayat sawda* (“a black life”) or *iswadat al dounia fi ouyouni* (“life has blackened in my eyes”)\(^1\). Patients may present with somatic complaints, including tightness in the chest and inability to breathe. Moreover, there may be symptoms of social isolation, darkening mood, and pessimistic outlook\(^1\).

**The Canadian Collaboration for Immigrant and Refugee Health (CCIRH) Guidelines indicate the following:**

- If an integrated treatment program is available, screen adults for depression using a systematic clinical inquiry or validated patient health questionnaire (PHQ-9 or equivalent). It is important to screen in a language in which the patient is fluent, either with translated instruments or through a trained interpreter.
  - An integrated treatment program consists of systematic patient education, allied health professionals to support continuity of care, frequent follow-up, and a plan for preventing relapse.
- Individuals with major depression may present with somatic symptoms (pain, fatigue, or other nonspecific symptoms)
- Connect suspected cases of depression with an integrated treatment program and case management or mental health care\(^3\).

**PTSD**

Refugees who face large-scale trauma and tremendous loss are at risk for posttraumatic stress disorder (PTSD). A recent 2015 CMAJ article found that in the refugee populations, 80% of those who experienced trauma showed improvement in their mental health status upon reaching safety\(^3\). However, the emotional distress that arises from exposure to regions wrought with conflict is far-reaching and lasting. Many individuals may present with depression and PTSD, making it difficult to differentiate between the two.

Indeed, the displaced population has been subject to some of the most horrific acts of violence in recent memory. However, it is important to ascertain how much these thoughts are affecting daily functioning if the diagnosis of PTSD is to be made.

**The Canadian Collaboration for Immigrant and Refugee Health (CCIRH) Guidelines indicate the following:**

- Do not conduct routine screening for exposure to traumatic events, because pushing for disclosure of traumatic events in well-functioning individuals may result in more harm than good.
- Be alert for signs and symptoms of post-traumatic stress disorder (unexplained somatic symptoms, sleep disorders, concomitant mental health disorders (ie, depression or panic disorder))
- Empathy, reassurance and advocacy are key to the recovery process\(^3\).

**Child Maltreatment**

The prevalence and incidence of child maltreatment amongst refugee populations are unknown\(^3\). However, studies show that children from ethnic minorities are eight times more likely to be screened for child maltreatment than children in the general population\(^3\). Some cultural practices, such as ‘cupping’, a traditional healing method in some Asian cultures, which leaves circular bruises, may be misinterpreted as signs of child...
maltreatment. The healthcare provider should consider the cultural context when considering child maltreatment and should take a sensitive approach, involving interpreters as needed. If child maltreatment is suspected, the provider must act in accordance with child protection laws in their regions.

In the current situation of Syrian refugees, there have been some reports of maladaptive coping strategies, which have included violence towards children or adopting an overprotective parenting style. Moreover, due to the situation in refugee camps and adopted communities, children may have been subject to abuse and exploitation. Clinicians should strive to understand child-rearing customs and disciplinary practices in families they see. They should also strive to encourage, educate, and support positive, safe, and healthy child-rearing practices.

The Canadian Collaboration for Immigrant and Refugee Health (CCIRH) Guidelines indicate the following:

- Do not conduct routine screening for child maltreatment. This recommendation is due to the poor performance of screening tools and the potential harms of the very high false positive rates.
- Be alert for signs and symptoms of child maltreatment during physical and mental examinations, and assess further when reasonable doubt exists.
- A home visitation program for the first two years of life should be offered to refugee mothers living in high-risk conditions, including: teenage motherhood, single parent status, social isolation, low socioeconomic status, or living with mental health or substance abuse problems.

Intimate Partner Violence

Defined as physical, emotional, financial, and/or sexual abuse against the victim by his or her intimate partner, intimate partner violence is a significant problem worldwide. Women are more often the victims than men. Women in war zones, disaster zones, or those displaced to refugee camps may also be at higher risk for intimate partner violence. Moreover, linguistic barriers, financial dependence, fear of losing custody of children, and limited knowledge of laws are all significant barriers to disclosure of intimate partner violence.

In the current conflict, sexual and gender based violence (SGBV) has increased substantially. Many women, and to a lesser degree, men, are subject to SGBV due to breakdown of law and order within Syria and disruption of traditional social networks. Domestic violence against women is the most common form of SGBV and has been found to be more prevalent due to the conflict. Evidence-based services (i.e., anger management) should be provided to patients if the clinician is concerned about SGBV. For more information on SGBV, please see the Women’s Health Concerns section.

The Canadian Collaboration for Immigrant and Refugee Health (CCIRH) Guidelines indicate the following:

- Do not conduct routine screening for intimate partner violence. Current evidence does not show clear benefits for screening and harm has resulted from screening.
- Be alert for potential signs and symptoms related to intimate partner violence, and assess further when reasonable doubt exists, or after patient disclosure.
For More Information

For more information regarding mental health specific to Syrian refugees, please see the following document compiled by authors working with the United Nations High Commission of Refugees (UNHCR) article entitled, “Culture, Context and the Mental Health and Psychosocial Wellbeing of Syrians: A Review for Mental Health and Psychosocial Support staff working with Syrians Affected by Armed Conflict.”

The document can be accessed at the following web address: http://www.unhcr.org/55f6b90f9.pdf

References


Back to Table of Contents
Oncologic Considerations
Written By: Dr. Samantha Sigurdson

Should I suspect malignancy in Syrian refugee patients?

Syrian refugees are at increased risk of cancer compared to Canadian citizens for several reasons. First, refugees may not have had access to screening for several years while they have been in refugee camps. The second is due to lifestyle choices; many refugees from Syria and the surrounding region smoke tobacco, have a high fat diet, and may not have time for regular exercise. For example, with Iraqi refugees, 40% of males had a history of smoking and 31% were currently smoking. This is much higher than the 18% prevalence of smoking in Ontario.

Treatment for cancer needs to be prioritized, as accessing proper care for malignancies was likely difficult for Syrians living in refugee camps. Chronic illnesses are commonly not treated in conflict settings due to resources being prioritized to acute medical issues. Refugees also tend to present at later stages of disease due to being unfamiliar with the health system, financial limitations, and/or delay seeking care due to competing priorities.

What cancer screening programs do they have in Syria?

There is limited data available regarding screening programs in Syria prior to the conflict. However, if refugees did receive screening prior to living in refugee camps, the screening may be out-dated based on Cancer Care Ontario (CCO) guidelines, as some refugees have lived in refugee camps or makeshift dwellings for several years. UNHCR recommends “screening should only be introduced in refugees if it is part of a well-established national programme with wide coverage and quality control measures in place”. This is the case in Canada, as refugees have IFHP healthcare coverage and evidence based screening guidelines exist for several cancers, including cervical, breast, and colorectal cancers. As such, Syrian refugees should be screened in accordance with the current cancer screening guidelines.

Are there specific cancers that are more common in Syrian populations?

It is difficult to ascertain the most prevalent types of cancer among Syrian refugees because epidemiological studies of cancer, including surveillance and registries, are scarce in countries affected by humanitarian emergencies. Syria was a middle-income country where non-communicable diseases became a more common cause of mortality than communicable diseases during the 21st century. Over the last two decades, cancer morbidity and mortality increased in Syria, which is most likely due to increased risk factors and improved documentation. The top three cancers for Syrian men, based on surveillance in Aleppo in 2001, were: bladder, leukemia, and lung cancer; in women, the top three were breast, uterus/cervix, and leukemia.

More recently, based on approved applications from 2010-2012 to the Exceptional Care Committee (a division of UNHCR that administers funds for refugees with illnesses whose treatments are more expensive than the $2000 USD allotted to each refugee each
year), the four most common cancers from Syria were breast cancer, leukemia and other haematological diseases, endocrine cancer, and colorectal cancer. However, this does not include rejected applications. The primary reason for rejected applications was poor prognosis, though high cost of treatment was also a factor.

These two data sets do differ for some malignancies and there are several reasons for this. Gynaecological cancers are most likely not found early in refugee camps due to reduced screening. When women become symptomatic, their prognosis would likely be poor and funding may have been denied. Similarly, lung cancer patients are usually only symptomatic in later stages when their prognosis is poor and again their applications for extra funding may have been denied.

Based on studies done with refugees in the United States from Iraq, female Iraqi refugees saw disease prevention as a function of hygiene and diet, rather than something achieved through health care providers. Iraqi refugees were likely to resist physician-driven changes in diet and exercise, regular screenings, and follow up appointments.

**Bottom line:**

- Follow CCO guidelines as per usual when screening Syrian refugees. Unless your patient states differently, operate under the assumption that they have never been screened before.
- The most common cancers in Ontario among men and women are also common in Syrian refugees (breast, lung, colorectal).
- For Syrian refugees, one should have a higher index of suspicion for leukemia and other haematological diseases, endocrine cancer, bladder cancer, uterine cancer, and cervical cancer.
- Please be aware of the health perspectives of newly resettled refugees and consider providing cancer education materials in Arabic to encourage timely screening.

**References**


Back to Table of Contents
Women’s Health Considerations
Written By: Dr. Stephanie Cargnelli
Contributors: Nadiya Goswami and Kyle LaFreniere

Women’s Health Concerns in Refugee Populations

Over 4.2 million refugees have been displaced by the conflict in Syria; of these, 80% are women and children\(^1,2\). Research has demonstrated that female refugees are more susceptible to poor reproductive health outcomes and violence, including sexual and gender-based violence, in comparison to their male counterparts\(^3\). As such, particular consideration needs to be given to this subset of the refugee population and their unique health care needs.

Gynaecological Considerations

Given the need to divulge sensitive information and the invasive nature of a gynaecological exam, care needs to be taken to ensure that physicians respect the cultural and religious practices of incoming refugee patients. Providers should inquire about any preference for a health care practitioner of a specific gender prior to initiating a clinical encounter. It is important to note that some women may be largely unfamiliar with their reproductive anatomy and may never have had a breast or internal examination\(^4\). Explaining the indications and the steps involved for all in office procedures will increase comfort. In one study conducted in 2012 at a community health center in Toronto, the most significant variable affecting Pap testing was inability to speak English\(^5\). Having a translator present to facilitate understanding and address any concerns may encourage full disclosure and compliance with recommended screening. Ensuring appropriate draping to allow for minimal exposure is important, particularly for Syrian refugees whose culture places a significant emphasis on modesty\(^6\). Deferring the more invasive aspects of the physical exam until a therapeutic alliance has been established should be a consideration.

The most common gynaecological problems reported by female Syrian refugees include menstrual irregularity, symptoms of reproductive tract infection, and severe pelvic pain or dysmenorrhea\(^3\). Female refugees are at greater risk for sexually transmitted infections including HIV\(^7\). This increased risk is caused by possible exposure to sexual and gender-based violence and the fact that some women may have been forced to trade sexual favours in exchange for necessities including food and protection as a result of the ongoing conflict\(^7\). It is important to inquire specifically about any gynaecological concerns and to take a sexual history (addressing if there were any previous reproductive tract infections).

Bottom Line:

- The most common gynaecological problems reported by female Syrian refugees include menstrual irregularity, symptoms of reproductive tract infection, and severe pelvic pain or dysmenorrhea.
- Ask specifically about sexual history and consider risks for sexually transmitted infections including HIV.
- Given the sensitive nature of the gynaecological exam, every effort should be made to conduct the assessment in a culturally sensitive manner.
Screening

In 2008, cervical cancer was the third most commonly diagnosed cancer in females worldwide and the fourth leading cause of female cancer deaths. Cervical cancer rates in Western countries have decreased up to 65% over the past four decades due to the availability of the Papanicolaou (Pap) test and vaccination. There is a disproportionate number of this largely preventable cancer in developing countries and medically underserved populations and this is primarily due to lack of screening. Unsurprisingly, cervical cancer mortality rates are 1.4 times higher among immigrant and refugee women compared to their Canadian born counterparts. Understanding of cervical cancer screening and its importance is limited among refugee populations. In one study conducted on Vietnamese females, it was found that 75% were unable to explain the importance of a Pap test and the majority believed their risk for cervical cancer was low. Similar results were found in a study conducted on Afghan women in whom 35% had never had a Pap test or were unsure of their screening status. As such, it is important to explain the importance of Pap testing to incoming refugees and emphasize the potential consequences of inadequate screening to increase compliance. Incoming refugee women should be screened according to current Canadian guidelines and HPV vaccination should be recommended to females age 9-26 years of age. Breast cancer screening with physical examination and mammograms should also be conducted as per current guidelines. It is important to reiterate that given the invasive nature of a PAP test, internal exam, and breast examination, care should be taken to ensure it is conducted in a culturally sensitive manner.

Bottom Line:
- Vaccinate females aged nine to twenty-six against HPV.
- Pap test should be recommended for all females aged 21 to 65. If normal, repeat Pap test should be conducted in three years.
- Mammograms should be started at the age of 50 unless there are indications for earlier screening and repeated every two years.

Contraception

The conflict in Syria has caused a significant decline in the use of contraceptives among Syrian women. Only 34.5% of women are currently using a family planning method in comparison to 58.3% in pre-conflict Syria. Contraception is a basic human right. As per the United Nations, everyone has the right to “decide...the number, spacing and time of their children and to have the information and the means to do so.” Some of the more commonly reported barriers to contraceptive use among displaced Syrian women include cost, distance/transportation, inaccessibility, and fear. Take a full contraceptive history and inquire about barriers to use. While the most commonly used forms of contraception in Syria are intrauterine devices (IUD) followed by oral contraceptives and the rhythm method, all contraceptive options should be reviewed including emergency contraception. Thoroughly explain the method of action of the contraception and all potential side effects. The use of a pelvic model or visual aids to explain the relevant anatomy, particularly for IUD insertion, should be considered to enhance understanding, adherence, and comfort. As with all women’s health concerns, cultural considerations should play a role in all contraception conversations. Be aware that some women are heavily influenced by their partner or other family members when making decisions.
contraceptive decisions. It is important to recognize this individual’s role and where appropriate, consider involvement in contraceptive counselling. In addition, some aspects of culture may influence which contraceptive method is chosen. For example, some African and Latin American cultures consider condoms to be a symbol of infidelity and promiscuity. Still other cultures have restrictions on intercourse in the presence of vaginal bleeding so methods causing spotting or irregular bleeding may not be ideal. Always ensure that patients are informed of all potential side effects of contraceptive methods to allow for a choice most consistent with their cultural practices and preferences.

The Interim Federal Health Program covers the cost of contraceptives for refugee claimants. An additional resource for newcomers lacking health insurance are publicly funded sexual health clinics as well as the Society of Obstetricians and Gynecologists of Canada (SOGC) who provides a Compassionate Contraceptive Assistance Program that provides aid for women in financial need. More information about this can be found at the SOGC webpage - www.sogc.org/compassionate/pdf/compassionate_form_e.pdf

Bottom Line:
- Inquire about contraceptive history and contraceptive need with each female refugee of childbearing age.
- Thoroughly explain all contraceptive options in a culturally sensitive manner.
- Inquire about and address all barriers to use.

Sexual and Gender-Based Violence (SGBV)

Sexual and gender-based violence has been shown to increase in times of conflict, particularly among refugees. This violence can take many forms including rape, sexual exploitation, domestic violence, forced early marriage, and even female genital mutilation. This violence is so pervasive that approximately one in five refugees or displaced persons in areas of conflict have experienced sexual violence. Furthermore, one in three women in Syria report feeling too scared or overwhelmed to leave their homes for fear of falling victim to SGBV. Only one in ten women report any exposure to SGBV for fear of stigma and alienation. These fears include including being viewed as unfit for marriage, lack of consequence for the perpetrator, and threat of honour killings in which a women is considered shameful following sexual assault and is killed by her family as a result. Perpetrators of rape in Syria may avoid repercussions by marrying their victim as the definition of rape under the Penal Code specifically excludes rape within marriage. This deep-seated fear is likely to be carried forward following immigration and the topic will need to be approached in a thoughtful, sympathetic manner.

A 2013 Vanity Fair article on the Syrian conflict featured commentary from Erika Feller, assistant high commissioner at the United Nations’ refugee agency who stated “Syria is increasingly marked by rape and sexual violence employed as a weapon of war [to destroy] identity, dignity, and the social fabrics of families and communities.” Acts of SGBV are even perpetrated by individuals delivering humanitarian aid, government soldiers, or males in positions of power in the community. Unfortunately, this may create feelings of mistrust and fear among refugee women in regards to those offering aid and those perceived to be authority figures. It is important for the healthcare practitioner to keep this in mind.

Screening should be considered in all incoming refugees if the clinician has a suspicion for SGBV, however there are some factors that make SGBV more likely including
refugees displaced in the context of extreme poverty, limited familial and social supports, lack of educational and employment opportunities, a diagnosis of HIV/AIDS, physical and mental disabilities, and displacement in the absence of a male partner. Victims may be reluctant to disclose exposure to SGBV and should not be pressured to divulge. Emphasize confidentiality and create a safe space devoid of judgmental or disparaging verbal and physical cues. Ensure that patients are aware that disclosure will not lead to some of the negative consequences they have come to expect prior to immigration. Be acutely aware of the sensitivity of this conversation and approach the topic in a mindful, compassionate manner. Victims will often have lasting physical, emotional, and mental hardship. Always consider screening for any sexually transmitted infections, unwanted pregnancies, genital mutilation, physical manifestations of trauma, PTSD and depression.

**Studies have indicated that SGBV does not reliably resolve following immigration.** In fact, domestic violence has been reported to increase post immigration and is largely attributed to adjusting to a new culture, male unemployment, and stress from trying to arrange housing, finances etc. Refugee women may be reluctant to expose struggles with domestic violence, particularly with their already limited social supports. It is important to recognize the signs but refrain from forcing the patient to disclose. Emphasize confidentiality and create a supportive, non-judgmental environment. It is imperative to ensure that refugee women are made aware that if they choose to leave the aggressor, safety will be provided and resources are available. A safety plan should be established and referral to counsellors and practitioners with experience in domestic violence should be offered.

Female genital mutilation (FGM) is traditionally not widespread in Syria but cases have been noted. The WHO defines FGM as “all procedures which involve partial or total removal of the external genitalia or other injury to the female genital organs whether for cultural or other non therapeutic reasons.” Some of the complications associated with FGM can include difficulties with micturition and menstruation, recurrent urinary tract infections, complications in pregnancy, labour, and delivery, and difficulty with sexual intercourse. Women may be limited in terms of their contraceptive options due to difficulty with insertion and a narrowed introitus may limit ability to conduct regular screening. If a women with FGM is encountered, use non-judgmental terminology and minimize the number of examinations conducted to minimize discomfort. Referral to a gynaecologist or practitioner with FGM management experience is necessary, particularly when there is a request for deinfibulation – the reversal of certain types of FGM.

**Bottom Line:**

- Sexual and gender-based violence is prevalent among Syrian female refugees and can present in a variety of forms including rape, sexual exploitation, domestic violence, forced early marriage, and even female genital mutilation.
- All incoming female refugees should be considered for screening of SGBV particularly among refugees displaced in the context of extreme poverty, limited familial and social supports, lack of educational and employment opportunities, a diagnosis of HIV/AIDS, physical and mental disabilities, and displacement in the absence of a male partner.
- Always approach this sensitive topic in a sympathetic, non-judgmental, culturally sensitive manner and always consider referral to a more experienced practitioner if not comfortable.
Pregnancy

Antenatal Care

A staggering one third of all immigrants and refugees to Canada are women of childbearing age and births to these women represent approximately one in five of the total births in Canada. **Access to antenatal care among refugee populations is significantly lower compared to non-refugee populations**. This accounts in large part for the worse pregnancy outcomes seen in this patient population. Some of the negative pregnancy outcomes seen in refugee populations include increased fetal mortality, low birth weight, premature labour, increase puerperal infections, and antenatal complications. Some refugees may have never had antenatal care prior to presenting for assessment. In addition to a full medical history, it is important to obtain a full obstetrical history as well, including prior pregnancies, previous pregnancy losses, previous modes of delivery, and antenatal care, if any. It is important to ensure that immunization history, domestic violence screening, history of food insecurity, and substance use are also explored at the initial intake. All refugee females should be offered the opportunity to establish pregnancy care with a primary care physician, an obstetrician, or a midwife. Obstetrical care providers should employ the use of the Ontario Antenatal Record to direct their history taking, physical examination, and required investigations. The record can be tailored to include relevant investigations including tests for tuberculosis and malaria. Cultural practices surrounding pregnancy may influence a patient’s expectations and should be explored to ensure that care is being provided in a manner that coincides with patient preferences. Refugees often have common misconceptions about pregnancy including a need for reduced caloric intake in the third trimester to have a smaller baby and thus an easier delivery or that all food eaten by a pregnant women must be warm. Investigate these misconceptions and provide accurate antenatal care in a culturally appropriate manner. Given the prevalence of sexual violence and inadequate access to contraception, it is important not to assume that the pregnancy was planned or desired. Options for termination of the pregnancy should be presented and discussed with the patient if this is consistent with patient preferences.

**Bottom Line:**
- Comprehensive antenatal care should be provided to all incoming refugee females in need.
- Patient preferences should be explored to ensure that care is provided in accordance with these preferences.

Labour, Delivery, and Postnatal care

**Syrian refugees will be largely unfamiliar with the Canadian healthcare system and will need to be oriented to options for delivery.** Given that there are higher rates of Caesarean section among newly arrived women compared to Canadian-born women, the potential for requiring this procedure as well as the risks and what it entails should be explained. Options for analgesia during labour and delivery should be explained and any questions and misconceptions regarding effects on the fetus should be addressed. Any formal birth plans including whether family members will be present for the birth and how the placenta is to be handled post birth should be arranged and considered. In the postnatal period, methods of contraception should be offered and reviewed. Information regarding breastfeeding and newborn care can be found in the Paediatrics section. **It is especially important in this population to screen for postpartum**
depression given the recent upheaval, high risk for exposure to violence, and often limited social supports. The Edinburgh Postnatal Depression Scale can be used to guide questioning and wherever possible, women should be interviewed individually in the absence of their family members. Treatment consistent with what would be provided to a Canadian-born female should be initiated.

**Bottom Line:**
- Syrian refugees will be largely unfamiliar with the Canadian healthcare system and will need to be oriented to options for delivery.
- Formal birth plans should be explored and care should be provided according to patient preference.
- In the postnatal period, methods of contraception should be offered and reviewed and all females should be considered for screening of postpartum depression given the increased risk in this population.

**Clinical Pearls and Cultural Considerations From An Expert Physician**

*Written By: Nadiya Goswami and Kyle Lafreniere*

The authors of this section were able to contact Dr. Malik Nedam Al Deen, a paediatrician from Syria, currently serving as the medical sector manager for Syria Relief’s humanitarian medical programme. He shared with us some clinical pearls from his experiences working as a Syrian physician.

In this role, he directly manages and operates a maternal hospital, 5 primary healthcare clinics, 3 nutrition centres (with a focus on newborn nutrition and lactation) and 3 women’s protection centres operating out of gynaecology clinics to provide counselling for women who have experienced violence. Dr. Malik Nedam Al Deen has extensive experience in maternal health in a humanitarian context through his work in Syria and Turkey for Syria Relief, Médecins du Monde, World Health Organization (Damascus), International Federation of Red Cross and Red Crescent Societies, and the Syrian Arab Red Crescent.

- **General Considerations**
  - Adapting to a new health system and familiarizing oneself to a new medical culture may provide barriers to care for some Syrian patients. Differentiating between minor health concerns, urgent health concerns, and emergent health concerns may not be intuitive for many of these patients, and consequently, it may be difficult for them to understand which issues should be addressed by a family physician versus an emergency room physician. Further complicating the matter, these patients may not know which services are available and covered by OHIP, or whether monetary compensation is required.

- **Family Planning**
  - Dr. Malik predicts that there will be a strong demand for family planning in female Syrian refugee patients of childbearing age. Education regarding
contraceptive methods will be important. In his experience, he has noticed that the preferred method of contraception is IUDs over oral contraception.

- **Rape and Sexual Assault**
  - The issue of sexual assault is particularly sensitive in Syrian culture. In many cases, patients will not share information related to sexual assault, even when asked directly. Dr. Malik reports that it is not uncommon for women to be disowned by their families after admitting to having been sexually assaulted.

- **Labour and Delivery**
  - Given their unfamiliarity with the Canadian healthcare system, Syrian refugee women may not know indications for contacting their obstetric care provider, coming to Labour & Delivery for assessment, and procedures involved with vaginal or operative deliveries. It will be important to provide clear instructions and patient education for when to come to hospital and what to expect.

**References**


**Back to Table of Contents**
Pediatric Considerations
Written By: Dr. Sarah Chaudhry and Dr. Zoyah Thawer

1) Initial Pediatric Intake

Caring for Kids New to Canada (www.kidsnewtocanada.ca - created by the Canadian Pediatric Society) has excellent templates for the initial visit, first follow up visit, and second follow up visit for paediatric newcomers/refugees. They can be filled out online and printed off for health care providers to use. To access these please use the following links:
1) Initial Assessment
2) Follow Up Visit 1
3) Follow Up Visit 2

Below is a Summary of what ‘Caring for Kids New to Canada,’ recommends in a refugee child’s initial work-up. Please see the website above for the complete recommendations. This is cited from the “Caring for Kids New to Canada” website. The authors of this booklet did not create or write the following templates. We do not take credit for these templates - all credit should be given to ‘Caring for Kids New to Canada’.

1. Initial Screening
   a) General
      • Complete blood count (CBC) with differential
         o Nutritional anemias, thalassemias, and G6PD deficiencies are common in Syrian populations.
   b) Serology
      • Hepatitis A (Hep A IgG), Hepatitis B (Hep B sAg (acute infection), HepBsAb(immunity))
      • Syphilis ≥ 15 years
      • Varicella Zoster Virus (VZV IgG ) ≥ 13 years
   c) Microbiology
      • Stool ova and parasite (O&P) 2 samples
      • TB testing (TST or IGRA)
   d) Specific Tests by Region – Middle East
      • Hb electrophoresis
      • G6PD
      • Hep C

2. Additional testing to consider
   a) General
      • Blood urea nitrogen (BUN)
      • Creatinine (Cr)
      • Liver function tests (LFTs)
      • Thyroid-stimulating hormone/thyroxine (TSH/T4)
   b) Serology
      • HIV serology (if patient has clinical manifestations)
      • Syphilis (if suspicious of sexual assault or congenital infection
      • Malaria smears/ Rapid Diagnostic Test (RDT) (if prolonged fever)
Medical assessment of immigrant and refugee children

Checklist: Initial Assessment

1. Address specific parental concerns
2. Complete history and physical including:

Complete Screening Assessments for:

- Vision
- Hearing
- Dental
- Growth
- Nutrition

3. Initial screening

   All children

General

- Complete blood count (CBC) with differential

Serology

- Hep A IgG
- Hep B sAg
- HepBsAb
- Syphilis ≥ 15 years
- VZV IgG ≥ 13yrs

Microbiology

- Stool ova & parasite (O&P) 2 samples
- TB testing (TST or IGRA)

Sample of template for Caring for Kids New to Canada,
Taken from: [http://www.kidsnewtocanada.ca/e-checklist/initial-assessment](http://www.kidsnewtocanada.ca/e-checklist/initial-assessment)
2) Post Arrival Tb Assessment of Syrian Refugee Children

Screening Process Before Immigration
All children 11 years or older should have had a chest x-ray in their country of origin. Moreover, all children suspected of having TB are referred for investigation prior to immigration.

What if Someone is Diagnosed with Tb Prior to Immigration?

- Those diagnosed with active TB should be treated before arriving to Canada
- **Tuberculin skin testing (TST) and interferon gamma release assay (IGRA) are not done for newcomers to Canada.**
  
  Important to note - Children are given the BCG (Bacillus Calmette-Guerin) vaccination at birth in Syria to provide protection against Tb.

The TB rate in Syria was low and stable prior to conflict (16 per 100,000 persons compared to Canada’s 4.6 per 100,000). According to a 2015 Conflict and Health article, “initial assessment found that tuberculosis among Syrian refugees was at a high incidence rate.” Public health strategies are currently in place to prevent the spread of Tb in Syria.

Active TB
TB should be considered in refugee children with a prolonged cough and fever for greater than 2 weeks.

**Classic Tb presentation:**
- Prolonged fever
- Cough with or without hemoptysis
- Night sweats
- Weight loss

*Important to note – children do not typically present with night sweats or weight loss*.
3) Development

Attitudes toward children with disabilities vary worldwide and may contrast with those held by the majority of Canadians. Educating families about child development, available resources, community supports, and how Canadian schools support children with disabilities will be useful to refugee families. According to a 2010 UNESCO study, few children with disabilities in the Middle East and North Africa, “have access to education, and for the few that do, the only integrated programmes are nascent and small in scope with a system that remains largely segregated between general and special education.”

Keep in mind that this article was published before the civil war in Syria and supports for children with disabilities have likely declined. In such a situation, educating families regarding disabilities and the supports they can access is important.

Caring for Kids New to Canada Recommendations on Disabilities:

- Initial visit: Parental concerns. Ask about child development, educational experience, and where families have come from. Use the Rourke or Ages and Stages Questionnaire. Ages and Stages is available in other languages besides English.
- When taking a medical history, consider diseases that are relatively uncommon in Canada that can lead to developmental problems:
  - Malaria
  - Vitamin B12 deficiency
  - Lead toxicity

4) Fast Facts on Education/ First Language Use and Bilingualism

- According to the UNHCR Syrian refugee children face many challenges regarding education. (World Vision).

Tb Work-up if Suspicion

- Sputum for TB smear and culture in those able to expectorate (write Tb smear for culture rather then C&S on requisition). 3 specimens are better than one. Intervals between collections can be as short as one hour.
- Induced sputum may produce better diagnostic results, though obtaining a sample requires expertise from a trained respiratory therapist.
According to World Vision between 2-3 million Syrian children are not attending school. The UN children’s agency reports that educational progress has been set back 10 years since the civil war started.

“In Syria, between 5,000 and 14,000 schools have been damaged, destroyed or occupied” - (World Vision).

It’s important to note that many Syrian children are unable to attend school because they have to work to financially support their families due to economic hardship.

It is important to make parents aware that there are educational supports in place in their respective communities to address any education-related concerns and that attendance for all children is mandatory.

5) Maltreatment and Trauma

In most cases, parents from all walks of life want what’s best for their children. Cultural practices regarding discipline, however, vary widely from country to country. As healthcare providers, it is important to take into account the impact that this has on a child’s welfare. Cultural beliefs about parenting and what constitutes maltreatment varies widely around the world and these beliefs may conflict with Canadian laws and attitudes.

Developing a culturally sensitive approach to child maltreatment may help a physician assess and understand how cultural beliefs impact family dynamics. Advocating for the child’s wellbeing is always first priority, as well as educating families regarding what constitutes child maltreatment in Canada. If maltreatment is suspected, child welfare authorities should be contacted.

Maltreatment may also have resulted from external, environmental factors in this population. The paediatric Syrian refugee population is unique to other newcomer populations due to the possible trauma that they may have endured. Syrian children may have experienced hardships that all too often occur in individuals who have been displaced from their homes. A 2013 United Nations report listed numerous types of abuse that Syrian children have been exposed to since the start of the civil war, “including sexual violence, to more general violation of their rights from school closures and denial of access to humanitarian aid.”

This same report also wrote that, “Government forces have also been responsible for the arrest, arbitrary detention, ill treatment and torture of children. Armed opposition groups have been responsible for the recruitment and use of children both in combat and support roles, as well as for conducting military operations, including using terror tactics, in civilian-populated areas, leading to civilian casualties, including children”...

“...Ill treatment and acts tantamount to torture reportedly included beatings with metal cables, whips and wooden and metal batons; electric shock, including to the genitals; the ripping out of fingernails and toenails; sexual violence, including rape or threats of rape; mock executions; cigarette burns; sleep deprivation; solitary confinement; and exposure to the torture of relatives.”

Children seen in your practice may have experienced some of these forms of abuse and may still be suffering from the lasting emotional, physical, and mental trauma. Mental health assessments and mental health supports should be offered when appropriate. Recent CMAJ guidelines regarding Syrian refugees do not recommend routinely screening for psychological trauma. They suggest assessing for impairment of social functioning or high levels of distress that may be related to post-traumatic stress disorder, depression or anxiety disorders, or exposure to war-related violence. If impairment is noted, appropriate
referrals and supports should be arranged.  

6) Hearing and Vision

Vision

Vision loss and undiagnosed ocular disease are commonly seen in refugee patients. 19% of children under 15 worldwide are visually impaired, of these, 12 million are treatable conditions (usually due to refractive errors). Current guidelines recommend that visual acuity be assessed soon after arrival. The IFHP covers 1 vision assessment/year and covers the cost of glasses every 24 months if needed for refugee patients. In children, vision is especially important for development. Visual impairment may be confused with, or present similarly, to a developmental disability leading to misdiagnosis. Some common causes of blindness in children rarely seen in Canada include:

- **Trachoma (Chlamydia trachomatis)**
  - Initially presents as “pink eyes”
  - Infection can cause the eyelid to turn inward, this causes the eyelashes to rub on the eyeball leading to intense pain and corneal scarring.
  - Can lead to irreversible blindness that usually manifests at 30-40 years of age.
  - Can be detected in office using standard office ophthalmoscope

- **Onchoceriasis**
  - Parasitic disease caused by the worm *Onchocerca volvulus*
  - Transmitted through the bites of infected blackflies of the Simulium species.
  - Requires referral to optometry or ophthalmology for slit lamp examination to examine anterior part of eye where larvae or scarring is visible in those affected.
  - Eye lesion usually occurs after years of severe infection in those found under age 30.

- **Xerophthalmia (blinding malnutrition)**
  - Vitamin A deficiency that can lead to scarring of the cornea.
  - 127 million children are affected by this worldwide.
  - To help combat xerophthalmia, the CDC recommends an age-appropriate daily multivitamin for all children aged 6 months to 59 months. Specific supplementation may be of benefit in children older than 5 years of age.

---

Vision Screening Recommendations as per Caring for Kids New to Canada:

- Age appropriate visual screenings soon after newcomers arrive.
- Referral to optometrist or ophthalmologist for evaluation if vision <6/12 with corrective lenses in place.
- Regular vision assessment of children’s eye anatomy and visual function.
- Preschool age – assess subjective acuity + ocular alignment + ocular media clarity.
Hearing

Hearing impairment can prevent a child from acquiring language skills in their new country of residence. This can be developmentally and socially detrimental to the child. Studies have shown that newcomer children are at an increased risk of having hearing impairment. While there are numerous causes for this, the most common is chronic suppurative otitis media. Obtaining an ENT history in the child may help determine if they are at risk of hearing impairment. A 2010 WHO report found that the frequency of conducting hearing screening varies worldwide. It is important to consider that refugee children may have never been screened for hearing impairments.

Hearing Screening Recommendations as per Caring for Kids New to Canada:

Two tests that can be offered to newborns and children:

- **Otoacoustic emission (OAE):** Used to check the response of the inner ear to sound.
- **Automated auditory brainstem response (AABR):** Used to check the brain’s response to sound.

According to best practice, OAE should be used first. If there is a ‘fail’, then AABR is used.

7) Breastfeeding

In 2010, prior to the Syrian conflict, UNICEF and the Syrian Ministry of Health launched a campaign to promote breastfeeding in Syria. This initiative was started because they found that there was resistance to breastfeeding amongst Syrian women. In fact, prior to the conflict, less than 50% of Syrian women were breastfeeding. Despite this initiative, pre-conflict attitudes towards breastfeeding seem to have prevailed. A 2014 UNHCR survey found that women in Syria typically have a preference for infant formula over breast milk. UNICEF is still actively trying to promote breastfeeding in Syria. In 2014 they held a three-day training on Infant and Young Child Feeding in Damascus to educate health care practitioners on the importance of exclusively breastfeeding for the first six months.

It is important to ask your patients about their perceptions and attitudes towards breastfeeding. They may have hesitation due to cultural beliefs, lack of confidence, poor technique etc. These issues need to be addressed in a culturally sensitive manner and the advantages of breastfeeding should be explained.

8) Patient Handouts in Arabic

Practitioners may have difficulty communicating with parents due to language barriers. Caring for Kids New to Canada provides excellent patient handouts translated into Arabic and can be found here: [http://www.kidsnewtocanada.ca/care/parent-info](http://www.kidsnewtocanada.ca/care/parent-info)
References


Back to Table of Contents
Common Medical Phrases Phonetically Translated into Arabic
Written By: Dr. Nagham El Houssein, Nabila Doghman, Ali El-Houssein, and Bilal Sabra

Healthcare professionals may find this helpful to have on hand when communicating with Syrian refugee patients. The below chart includes common phrases physicians use during history intake, their Arabic translation in Arabic, and their Arabic translation phonetically spelled out in English.

Patient handouts translated into Arabic may also be useful and can be found at the following link:
https://www.healthinfotranslations.org/language/arabic/392138/
Refer to Figure 1 below for sample excerpts of patient handouts from the above website.

<table>
<thead>
<tr>
<th>English</th>
<th>Arabic</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hello</td>
<td>مرحبًا</td>
<td>Marhabah</td>
</tr>
<tr>
<td>How are you?</td>
<td>كيف حالك</td>
<td>kayf halik?</td>
</tr>
<tr>
<td>Any chest pain?</td>
<td>وجع في الصدر</td>
<td>Waja’ fill sidder?</td>
</tr>
<tr>
<td>Any shortness of breath?</td>
<td>ضيق تنفس</td>
<td>Deyik tanafus?</td>
</tr>
<tr>
<td>Any cough?</td>
<td>أي سعال</td>
<td>'ay sa’ala?</td>
</tr>
<tr>
<td>Any abdominal pain?</td>
<td>أي ألم في البطن</td>
<td>'ay 'alam fi albatun?</td>
</tr>
<tr>
<td>Do you have a fever?</td>
<td>أي حمى</td>
<td>‘ay humma?</td>
</tr>
<tr>
<td>Any dizziness?</td>
<td>أي الدوخة</td>
<td>‘ay dowkha?</td>
</tr>
<tr>
<td>Any blood?</td>
<td>أي دم</td>
<td>‘ay dem?</td>
</tr>
<tr>
<td>Where is it?</td>
<td>فين</td>
<td>fayn?</td>
</tr>
<tr>
<td>When did it start?</td>
<td>متى بدأت</td>
<td>mataa bada'at?</td>
</tr>
<tr>
<td>Does it move anywhere?</td>
<td>أنها لا تتحرك في أي مكان</td>
<td>'annaha la tataharrak fi 'ay makan?</td>
</tr>
<tr>
<td>English Term</td>
<td>Arabic Term</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td>Has it happened before?</td>
<td>وقَد حَدَثَ هَذَا مِنْ قِبْلَ؟</td>
<td></td>
</tr>
<tr>
<td>How long has this been going on?</td>
<td>مَتَى تَمَتْ هُذَا كَانْ يَحْدُث</td>
<td></td>
</tr>
<tr>
<td>Do you have pain?</td>
<td>عَنْدَكَ وَجَعّ؟</td>
<td></td>
</tr>
<tr>
<td>The pharmacy</td>
<td>صِيدلية</td>
<td></td>
</tr>
<tr>
<td>The medicine</td>
<td>الدواء</td>
<td></td>
</tr>
<tr>
<td>The ambulance</td>
<td>سيارة اسعاف</td>
<td></td>
</tr>
<tr>
<td>The hospital</td>
<td>مستشفى</td>
<td></td>
</tr>
<tr>
<td>A Cold</td>
<td>بَرَد</td>
<td></td>
</tr>
<tr>
<td>Flu</td>
<td>أُنفلوْنزا</td>
<td></td>
</tr>
<tr>
<td>Infection</td>
<td>عَدْوَى</td>
<td></td>
</tr>
<tr>
<td>Virus</td>
<td>فِيروس</td>
<td></td>
</tr>
<tr>
<td>Allergy</td>
<td>حَساَسِيَة</td>
<td></td>
</tr>
<tr>
<td>Menstrual Pain</td>
<td>مَغْصُ</td>
<td></td>
</tr>
<tr>
<td>Hay fever</td>
<td>حَساَسِيَة زَرع</td>
<td></td>
</tr>
<tr>
<td>Bandage</td>
<td>شَاش</td>
<td></td>
</tr>
<tr>
<td>Pain killers</td>
<td>مَسْكَن</td>
<td></td>
</tr>
<tr>
<td>Sleeping pills</td>
<td>حَبْوَب مَنَوْمَة</td>
<td></td>
</tr>
<tr>
<td>Cough syrup</td>
<td>دوَاء كَحة</td>
<td></td>
</tr>
<tr>
<td>Throat lozenges</td>
<td>حَبْوَب اسْتَحْلَابِ الْزُور</td>
<td></td>
</tr>
<tr>
<td>Prescription</td>
<td>رُوْضَة</td>
<td></td>
</tr>
<tr>
<td>Condition</td>
<td>Arabic Description</td>
<td>English Description</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Diabetes</td>
<td>مرض السكر</td>
<td>Marad as-sukkar</td>
</tr>
<tr>
<td>Cancer</td>
<td>مرض السرطان</td>
<td>Marad as-saraten</td>
</tr>
<tr>
<td>Heart Attack</td>
<td>أزمة قلبية</td>
<td>Azma qalbiyya</td>
</tr>
<tr>
<td>Cirrhosis</td>
<td>تليف</td>
<td>Talayuuf</td>
</tr>
<tr>
<td>Asthma</td>
<td>ربو</td>
<td>Rabwa (azma)</td>
</tr>
<tr>
<td>Arthritis</td>
<td>التهاب المفصل</td>
<td>Al-tihaab al maf sill</td>
</tr>
<tr>
<td>Hypertension</td>
<td>ارتفاع ضغط الدم</td>
<td>Irtifaa daghit ad-damm (daghit dam ‘aali)</td>
</tr>
<tr>
<td>Kidney</td>
<td>الكلى</td>
<td>Alkulaa</td>
</tr>
<tr>
<td>Heart</td>
<td>قلب</td>
<td>Qalb</td>
</tr>
<tr>
<td>Smoking</td>
<td>تدخين</td>
<td>Tadkheen</td>
</tr>
<tr>
<td>Contraception</td>
<td>منع الحمل</td>
<td>mane’ alhaml</td>
</tr>
<tr>
<td>Goodbye</td>
<td>مع السلامة</td>
<td>Ma’a salama</td>
</tr>
</tbody>
</table>
Contributors

A special thank you to our volunteers who made valuable contributions to this booklet. Without your expertise and hard work, none of this would be possible. Thank you for your hard work and well-polished pieces!

- The Editing Team

Editors:
Dr. Sarah Chaudhry
Dr. Stephanie Cargnelli
Dr. Laurel Laakso
Dr. Balal Lone

Contributors
Dr. Naweed Ahmed
Dr. Stephanie Cargnelli
Dr. Sarah Chaudhry
Dr. Katie Dalziel
Nabila Doghman
Dr. Nagham El Houssein
Ali El-houssein
Nadiya Goswami
Rachel Han
Dr. James Heywood
Nicole Jedrzejko
Ramya Kancherla
Myra Khan
Robert Kudlovich
Dr. Laurel Laakso
Kyle LaFreniere
Shan Leung
Dr. Balal Lone
Mo Moore
Bilal Sabra
Jessica Shanahan
Rabiya Sheikh
Dr. Samantha Sigurdson
Daegan Sit
Dr. Zoyah Thawer
Priscilla Yung

Back to Table of Contents