

Refugee Health: Overseas to Massachusetts

Division of Global Populations and Infectious Disease
Prevention

Bureau of Infectious Disease Prevention and
Laboratory Sciences

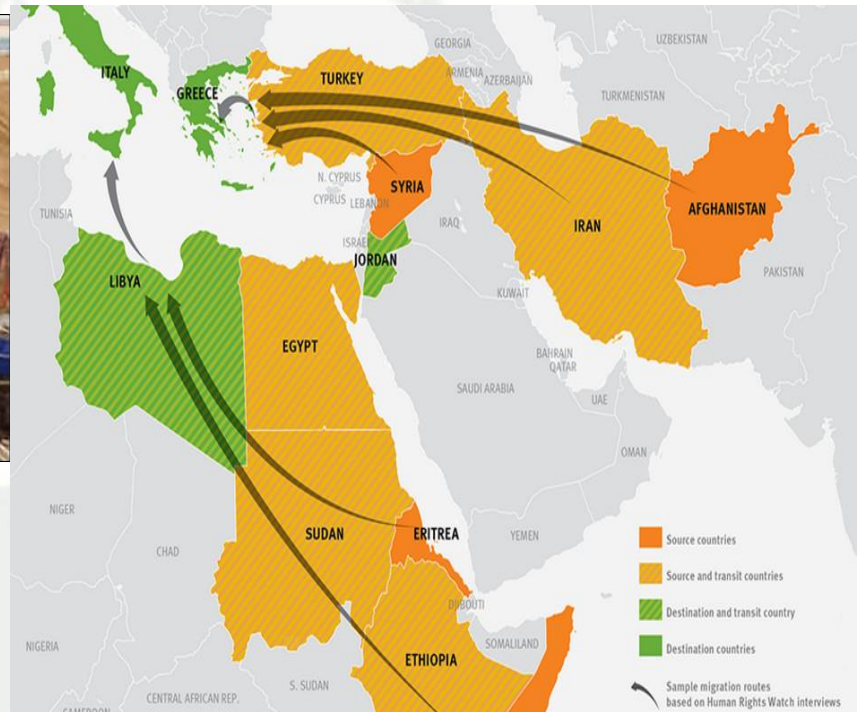
Department of Public Health



Objectives

- Increase understanding of refugee resettlement process
- Increase awareness about refugee health screening processes:
 - Overseas to domestic
 - Transition to primary care
- Increase understanding of challenges associated with refugee health services

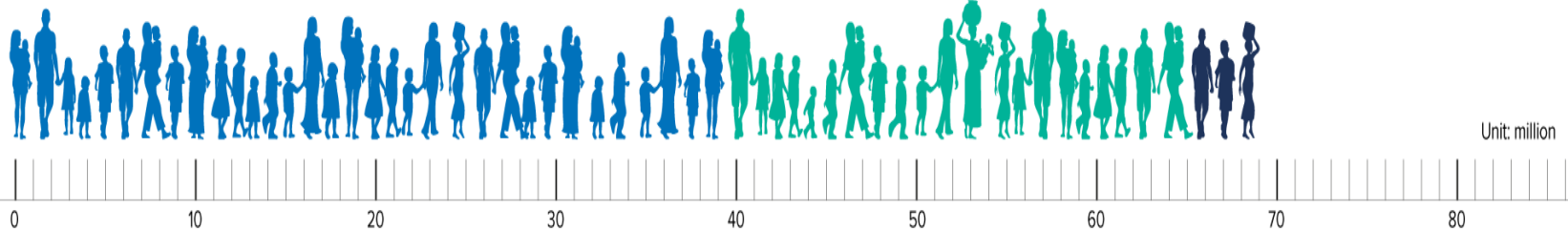
Who is a Refugee?



“Someone who is unable or unwilling to return to their country of origin owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion.”
(UNHCR)

Forced Migration: Numbers at a Glance (2017, UNHCR)

68.5 million forcibly displaced people worldwide



Internally Displaced People
40 million

Refugees
25.4 million

19.9 million under UNHCR mandate
5.4 million Palestinian refugees registered by UNRWA

Asylum-seekers
3.1 million

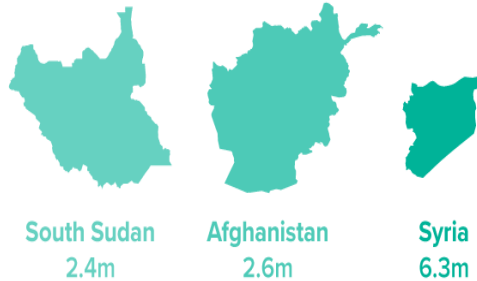
Forced Migration: Numbers at a Glance (2017, UNHCR)

Where the world's displaced people are being hosted

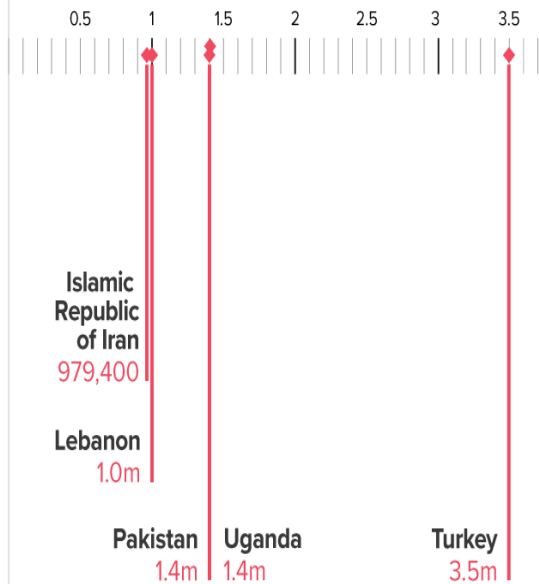


85 per cent of the world's displaced people are in developing countries

57% of refugees worldwide came from three countries



Top refugee-hosting countries



102,800
Refugees resettled

Overseas Refugee Processing: Key U.S. and International Agencies (1)

- U.S. Department of State's Bureau of Population, Refugees and Migration (PRM)
 - The first U.S. government point of contact
 - Coordinates resettlement process with other agencies – tracks medical exams and security clearances through contracts to operate Overseas Processing Entities (OPE) in key locations
- U.S. Citizenship and Immigration Services (USCIS)
 - Interview applicants, issue approvals/denials (security vetting)
- U.S. Centers for Disease Control and Prevention (CDC)
 - Provide technical instructions for overseas medical exams

Overseas Refugee Processing: Key U.S. and International Agencies (2)

- United Nations High Commissioner for Refugees (UNHCR)
 - Primarily responsible for referring qualified applicants to U.S. authorities
- International Organization for Migration (IOM)
 - Conducts overseas medical exams for most U.S. bound refugees
 - Manage large refugee movements and travel on behalf of governments

Overseas Refugee Processing (3)

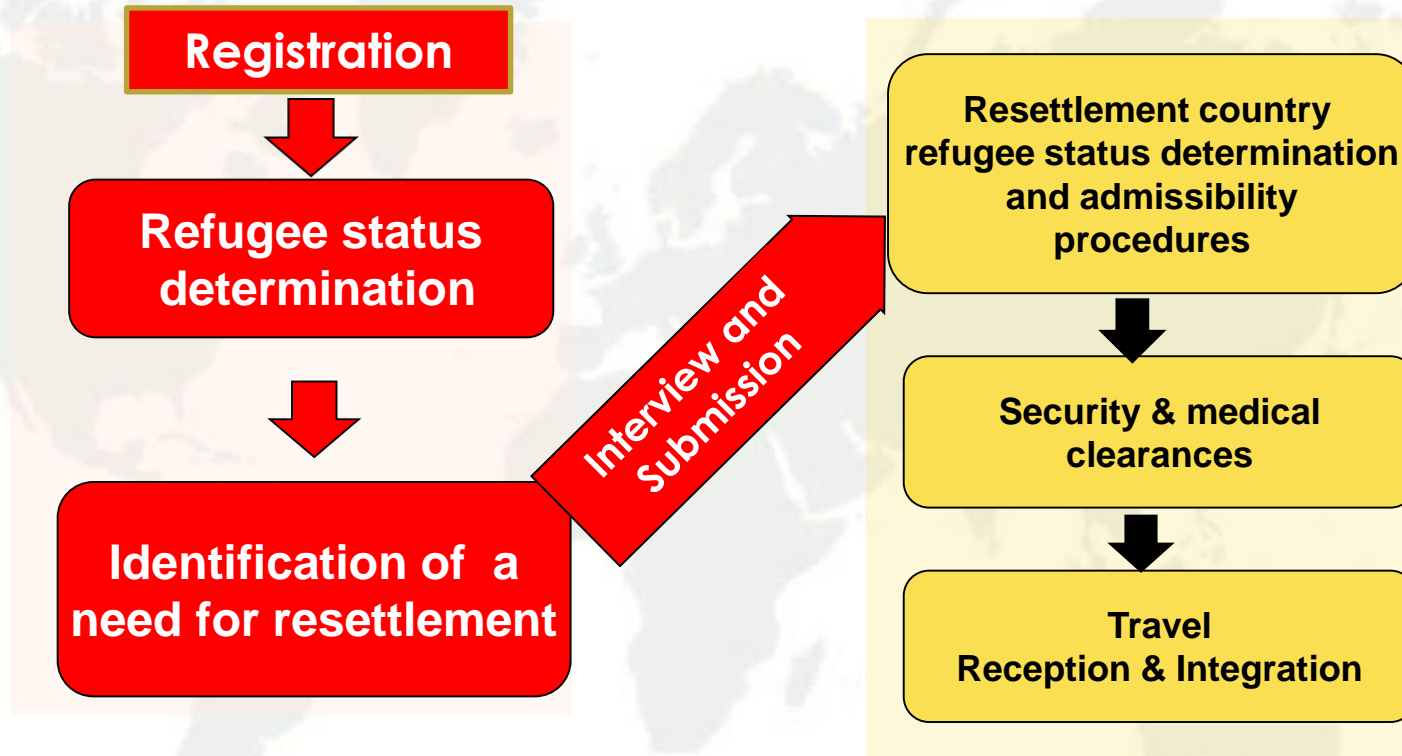


People waiting to be seen at the UNHCR compound in Kuala Lumpur in Malaysia



Overseas medical checks outside of a Thai camp

Pathway for Refugee Resettlement



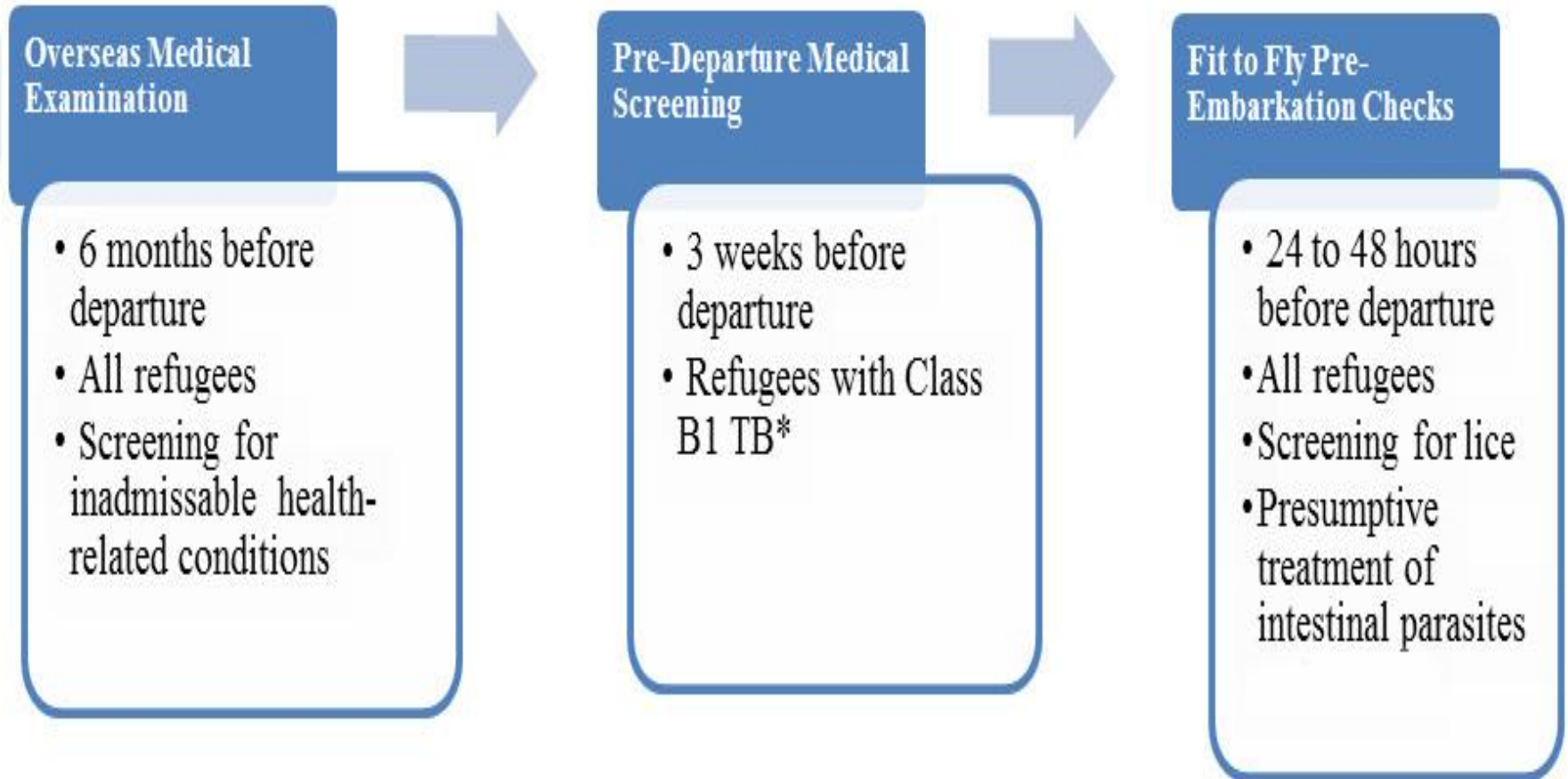
Overseas Medical Examination

- To determine if refugee has a condition that would exclude him/her from entering the US:
 - Communicable disease of public health significance
 - Current or past physical or mental disorders that are or have been associated with harmful behavior
 - Drug abuse or addiction

Disease of Public Health Significance

- Infectious tuberculosis
- Syphilis
- Other sexually transmitted diseases (e.g. chancroid, gonorrhea, granuloma inguinale, lymphogranuloma venereum)
- Hansen's disease (leprosy)

Medical Assessment of US-Bound Refugees



Overseas Medical Examination: Expanded Programs

- Expanded pre-departure immunization program
- Pre-departure presumptive treatment for malaria and parasites
- Voluntary testing and management of hepatitis B virus (HBV) infection

Selected Vaccine Preventable Diseases Affecting U.S. Bound Refugees

2003-2005: Measles, rubella, varicella, Côte D'Ivoire (Liberian refugees)

- Death of 1 child (measles)
- U.S.-born child with congenital rubella
- Delay of resettlement > 6 m during outbreak control period

2006: Polio, Dadaab, Kenya (Somali refugees)

- Related outbreak control costs: \$309,283

2003

2005

2006

2011

Dec 2012
Vaccine
Program
Starts

2005: Measles, Eastleigh, Kenya (Somali refugees)

- CDC recommended vaccination & waiting 1 incubation period before resettlement
- Recommendations not implemented due to cost concerns
- Results: Ill refugee arrives in U.S.; domestic outbreak response and surveillance

2011: Measles, Kuala Lumpur, Malaysia (Burmese refugees)

- Symptomatic in-flight; transmission to 2 other children on the plane
- Several epidemiologically linked cases, including a case in a CBP officer
- Extensive overseas & domestic outbreak control and vaccination efforts
- Related costs ~\$130,000

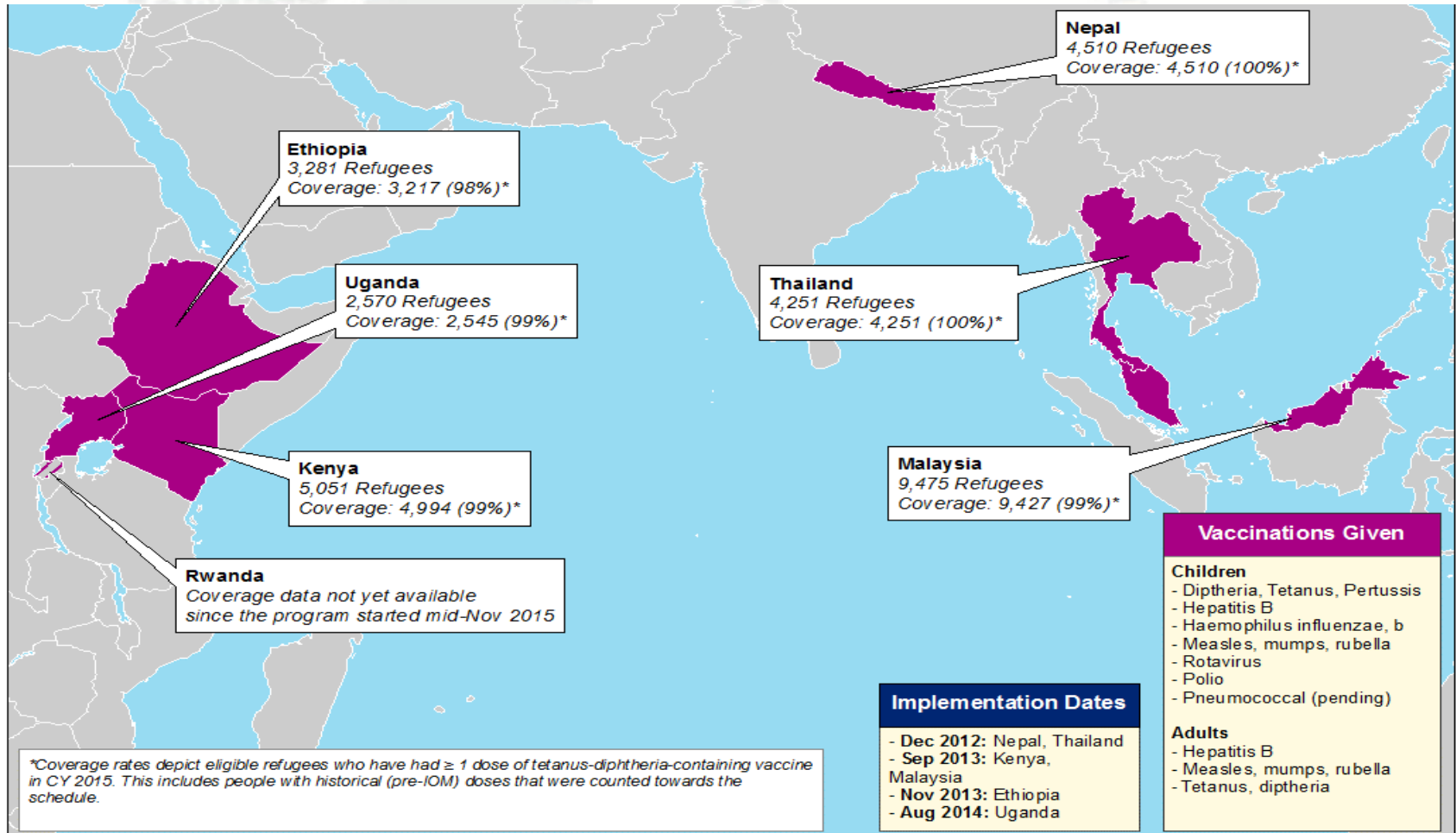
Vaccination Program for US Bound Refugees (VPR)

- Receive a required overseas medical examination 2 to 6 months prior to arrival
- Vaccination not required for US-bound refugees
 - Refugees may be incompletely immunized
 - Outbreaks during and after resettlement
 - Travel delays
 - School entry delays for children after arrival
- In 2011, a domestic measles case was diagnosed in an unvaccinated Burmese refugee immediately following resettlement to the U.S.
 - Required multistate response; delayed resettlement

Vaccination Program for US Bound Refugees (VPR) (2)

- CDC collaborated with US Department of State's Bureau of Population, Refugees and Bureau (PRM) and IOM (2012)
- Initial program involved vaccinating refugees in Kenya, Ethiopia, Thailand, Malaysia, and Nepal
 - 2-3 doses of vaccine series overseas
 - First dose of all vaccines given at the overseas medical screening exam, ~2-6 months before departure

Expanded Vaccination Program for U.S. Bound Refugees, 2015 (3)



Expanded Vaccination Program: Next Steps

- Overseas:
 - Update schedule periodically based on vaccine availability and U.S. schedule/ACIP changes
 - Monitor/respond to VPD outbreaks
 - Identify/address cold chain issues
 - Enhance staff training and health education for refugees
 - Improve adverse events reporting

Expanded Vaccination Program: Next Steps

- Domestic:
 - Promote awareness of program
 - Improve U.S. clinician access to vaccine records via EDN
 - Establish linkages with state registries
 - Expand to other countries overseas

Hepatitis B Pre-vaccination Testing

- CDC, 2008
 - “All persons born in geographic regions with HBsAg prevalence of > 2% . . . should be tested for chronic HBV infection. This includes immigrants, refugees, asylum seekers, and internationally adopted children born in these regions, regardless of vaccination status in their country of origin (123). . . Because HBsAg prevalence can vary within these regions, additional knowledge about local HBsAg prevalence can be used to guide decision making regarding testing.” (<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5708a1.htm>).
- Rapid HBsAg
- Vaccination of negatives; counseling of positives

Refugee U.S. Entry and Arrival Notification



Overseas

Visa issued/Cleared for travel



US Ports Of Entry/Arrival

Quarantine officers review documents
Documents forwarded to CDC/DGMQ electronically



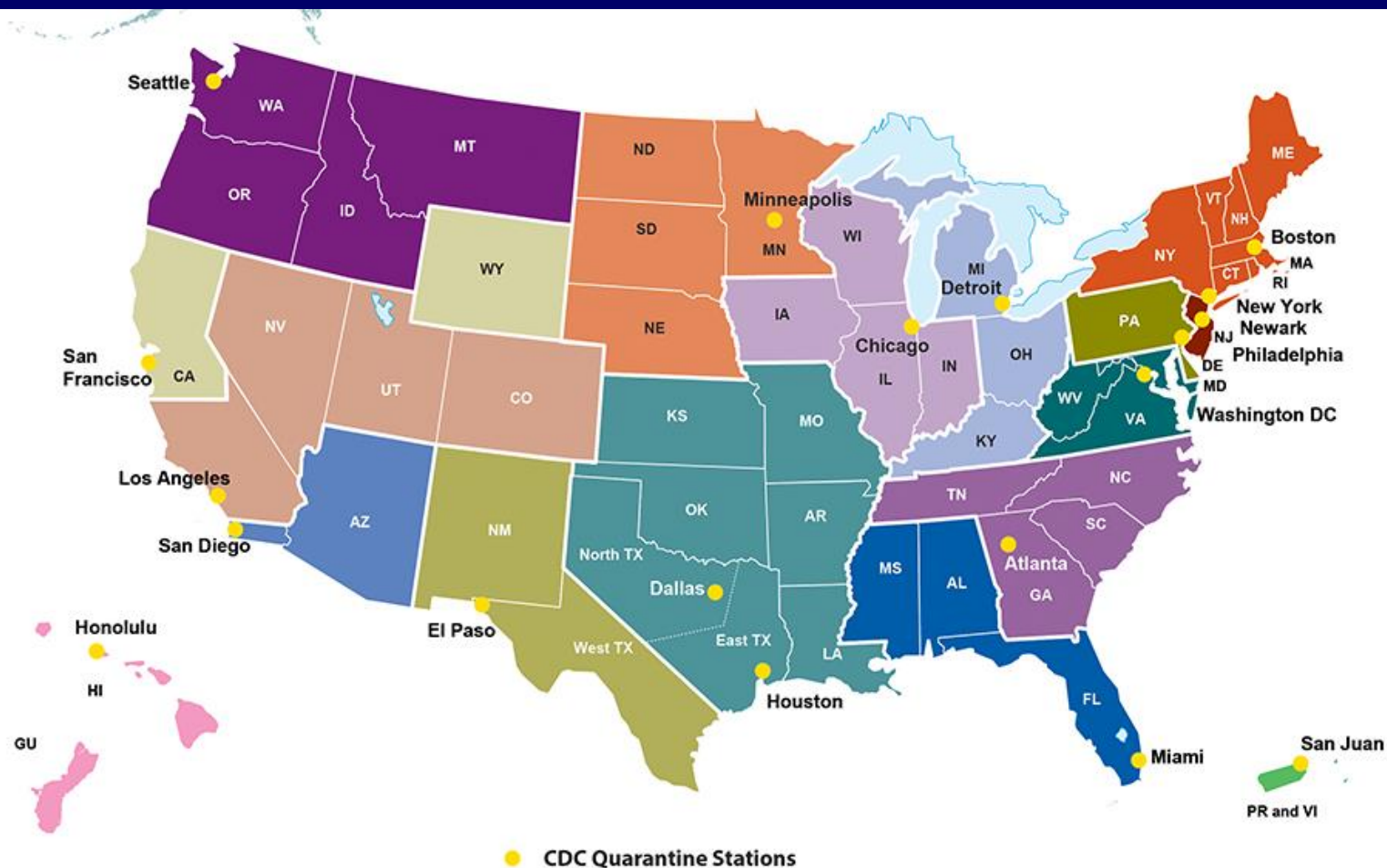
State & Local Jurisdictions

DGMQ notifies Division of Global Populations & Infectious Disease Prevention electronically via MAVEN

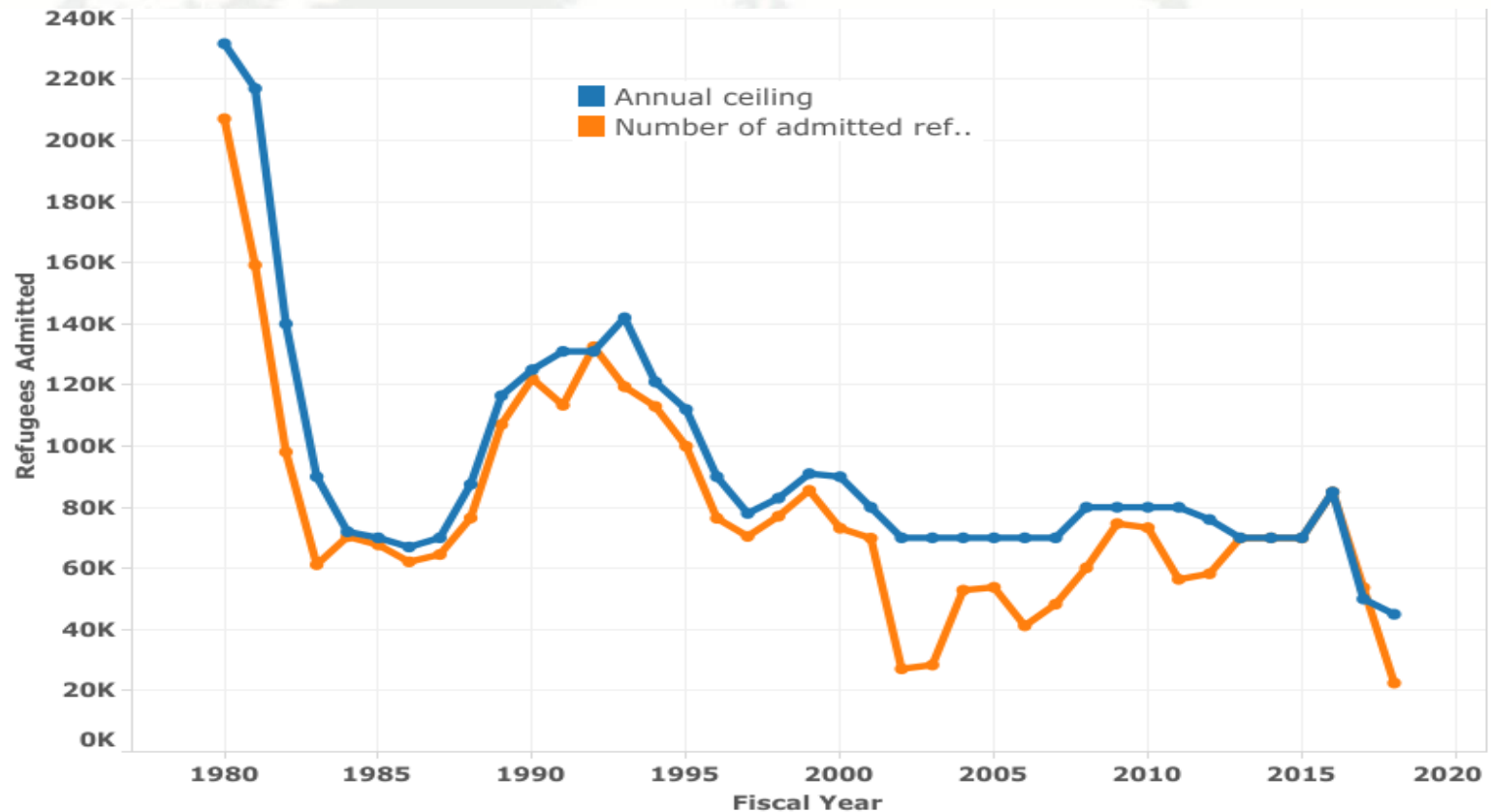


MDPH notifies **local public health** via MAVEN
[when resettlement address is known]

CDC Quarantine Stations by Jurisdiction



Refugee Resettlement in the U.S. (1980 – 2018)

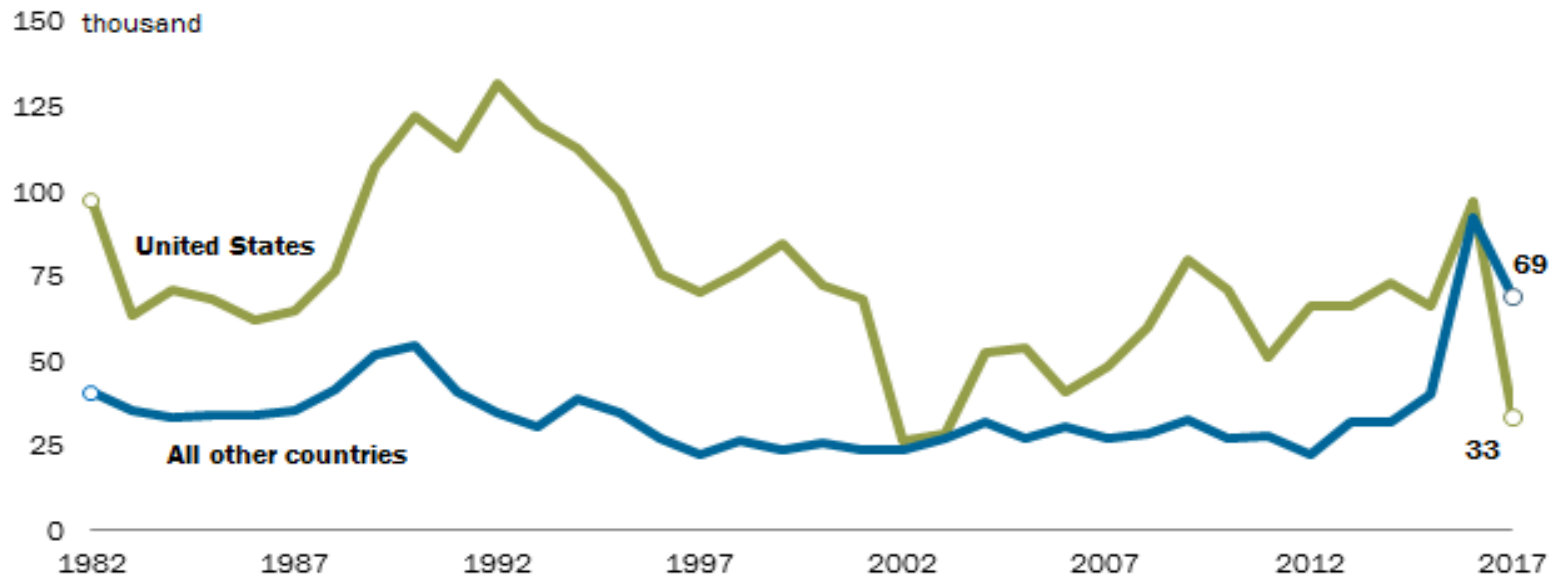


Migration Policy Institute (MPI) Data Hub
<http://migrationpolicy.org/programs/data-hub>

Drop in U.S. Refugee Resettlement

Number of refugees resettled in the U.S. falls below total from the rest of the world for the first time in 2017

Number of resettled refugees worldwide, in thousands



Source: Pew Research Center Analysis of United Nations High Commissioner on Refugees data, accessed June 27, 2018.

PEW RESEARCH CENTER

Refugee Arrival Notification

MAVEN event

Electronic via MAVEN



LBOH Nurse



Division of Global Populations
Regional Coordinator



Refugee Health Assessment
Program Provider



Community Health Worker

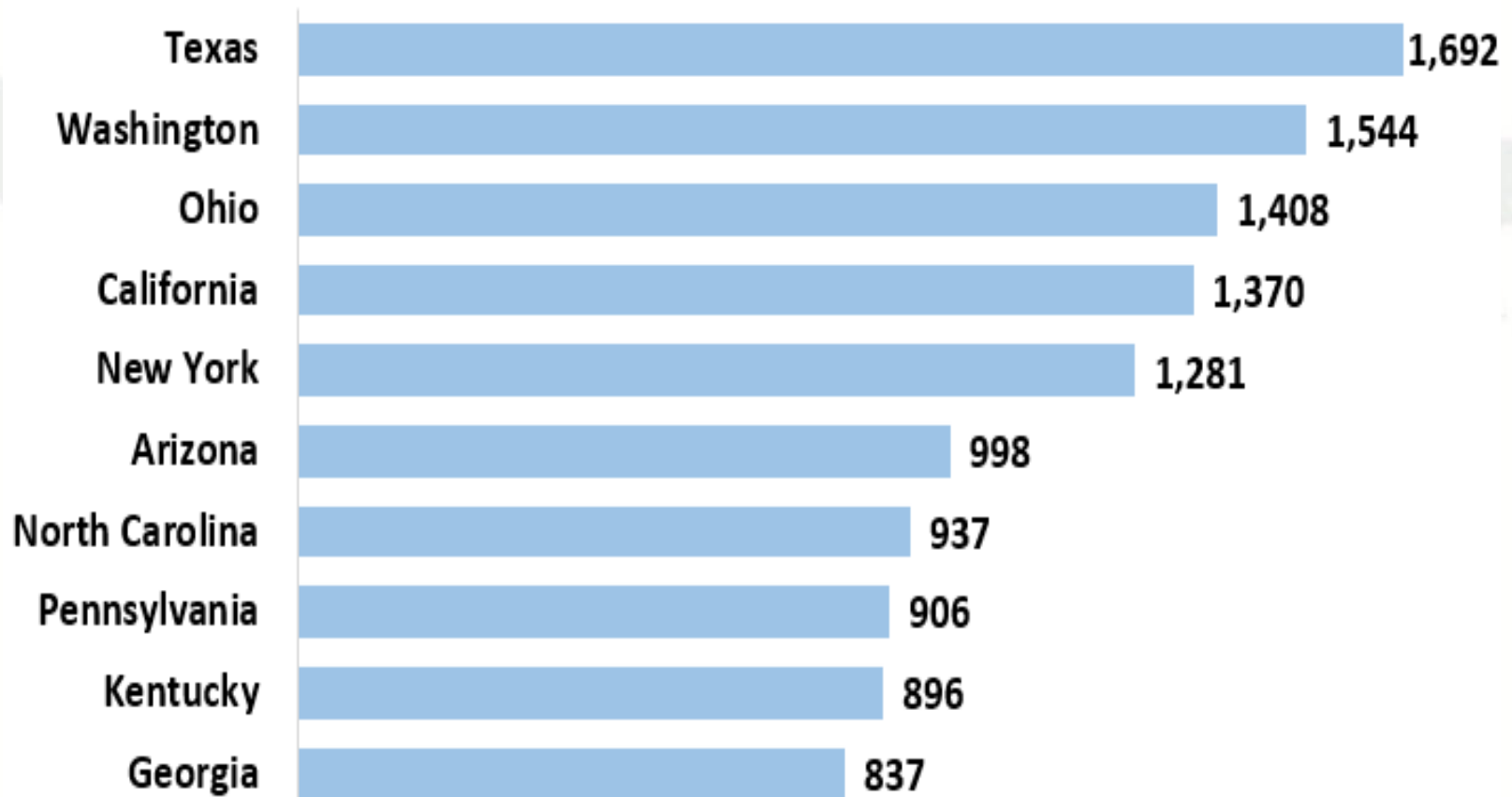
Refugee Resettlement Trend in the U.S.

| 2017* | | |
|--|---------------|--------------|
| Country | Number | Percent |
| Dem. Rep. Congo | 7,305 | 17.2 |
| Iraq | 6,139 | 14.5 |
| Syria | 6,065 | 14.3 |
| Somalia | 5,167 | 12.2 |
| Burma | 3,759 | 8.9 |
| Ukraine | 2,869 | 6.8 |
| Bhutan | 2,321 | 5.5 |
| Iran | 2,136 | 5.0 |
| Eritrea | 1,140 | 2.7 |
| Afghanistan | 1,091 | 2.6 |
| All other countries, including unknown | 4,422 | 10.4 |
| Total | 42,414 | 100.0 |

| 2016 | | |
|--|---------------|--------------|
| Country | Number | Percent |
| Dem. Rep. Congo | 16,370 | 19.3 |
| Syria | 12,587 | 14.8 |
| Burma | 12,347 | 14.5 |
| Iraq | 9,880 | 11.6 |
| Somalia | 9,020 | 10.6 |
| Bhutan | 5,817 | 6.8 |
| Iran | 3,750 | 4.4 |
| Afghanistan | 2,737 | 3.2 |
| Ukraine | 2,543 | 3.0 |
| Eritrea | 1,949 | 2.3 |
| All other countries, including unknown | 7,994 | 9.4 |
| Total | 84,994 | 100.0 |

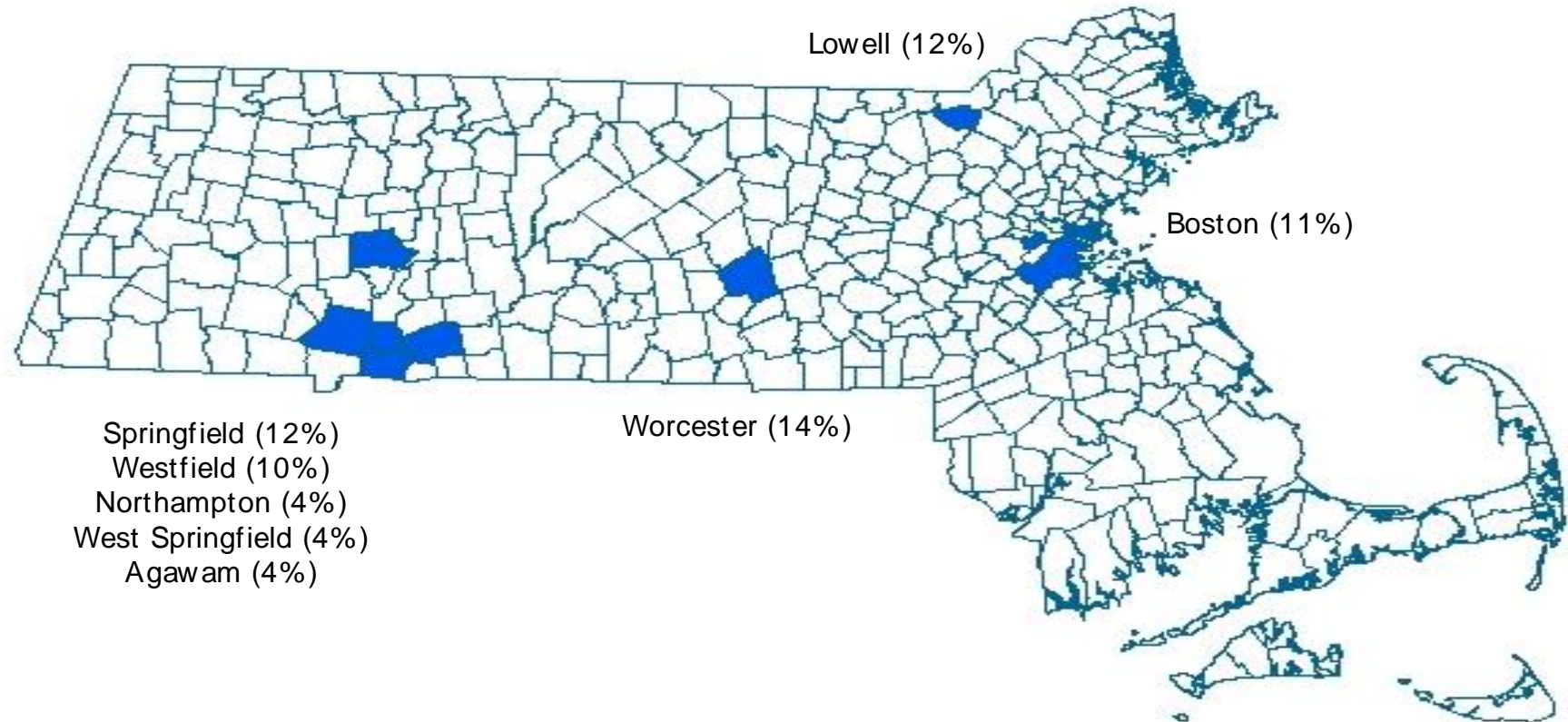
| 2015 | | |
|--|---------------|--------------|
| Country | Number | Percent |
| Burma | 18,386 | 26.3 |
| Iraq | 12,676 | 18.1 |
| Somalia | 8,858 | 12.7 |
| Dem. Rep. Congo | 7,876 | 11.3 |
| Bhutan | 5,775 | 8.3 |
| Iran | 3,109 | 4.4 |
| Syria | 1,682 | 2.4 |
| Eritrea | 1,596 | 2.3 |
| Sudan | 1,578 | 2.3 |
| Cuba | 1,527 | 2.2 |
| All other countries, including unknown | 6,870 | 9.8 |
| Total | 69,933 | 100.0 |

Where do Refugees Live?



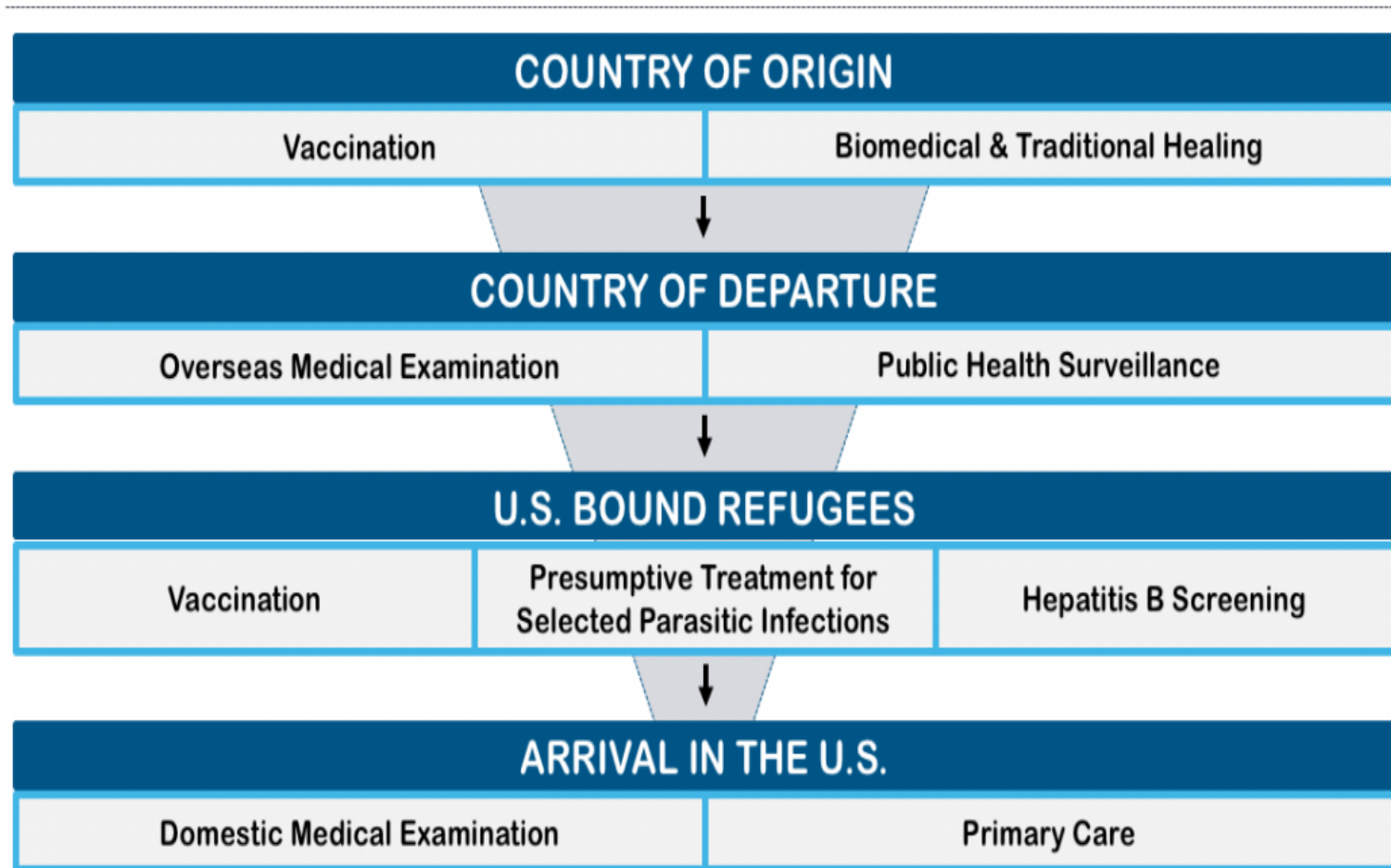
Top refugee resettlement cities in MA*

1/1/18 – 12/31/18 (N= 628)



Mass Department of Public Health – MAVEN [* Who stayed in MA, with known address]

Continuum of Care from Overseas to Arrival



Connecting Overseas Medical to Domestic Assessment

- Collaborations between CDC and state health departments.
 - MDPH is the point of notification of all refugee arrivals in Massachusetts
- Notification of local health departments except for unaccompanied minors:
 - If follow-up for infectious disease is needed

Goal for Domestic Health Assessment

- All refugees should have access to a quality domestic health assessment
 - Informed by overseas exam
 - Organized within a public health framework
 - Link to primary care
 - Provided through contracted hospitals and community health centers

Refugee Health Assessment Program

- First point of contact with US health care system
- Public health screening protocol
 - History and Physical
 - Testing for health conditions
 - Behavioral health assessment (resources available)
 - Immunizations
 - Treatment of any urgent or acute health problems
 - Referral to primary care



Refugee Health Assessment Program

- Language and culture appropriate follow-up:
 - Health orientation and education
 - US health care system
 - Disease specific health education
- Infectious disease follow-up

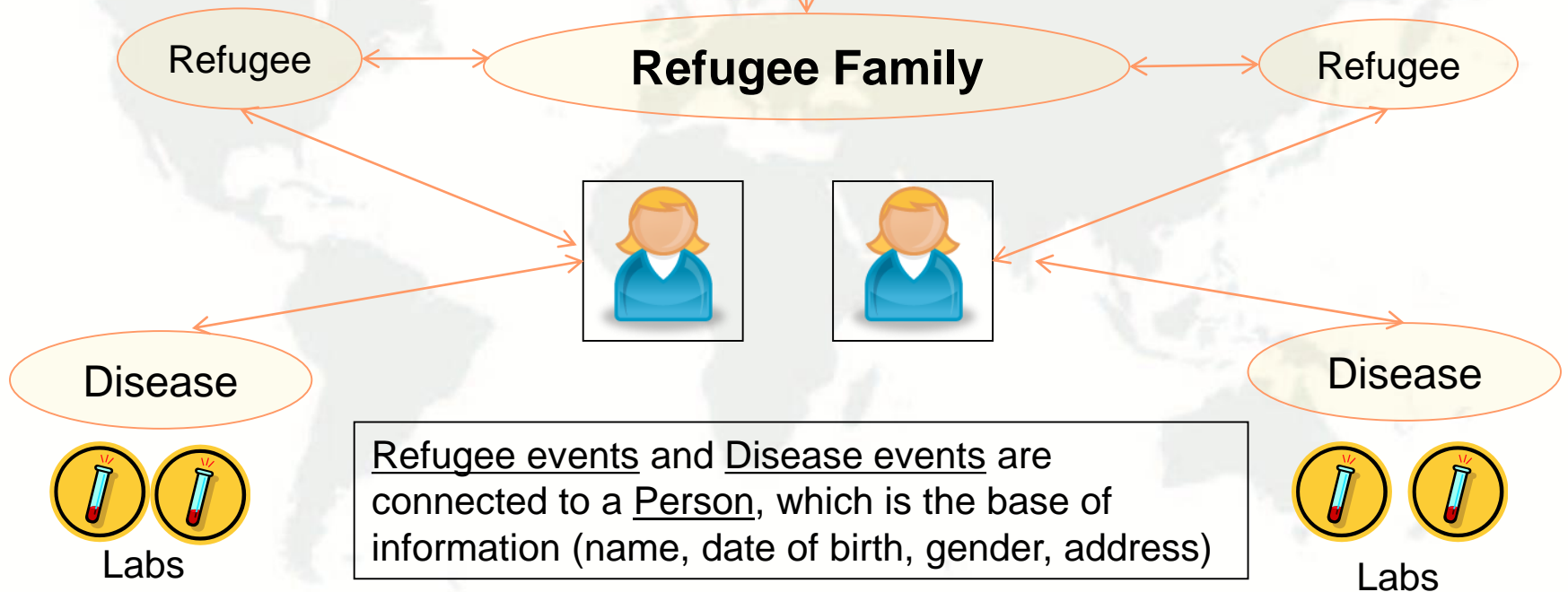


Refugee Module

Refugee Family events are linked to Refugee events with the Refugee Family link



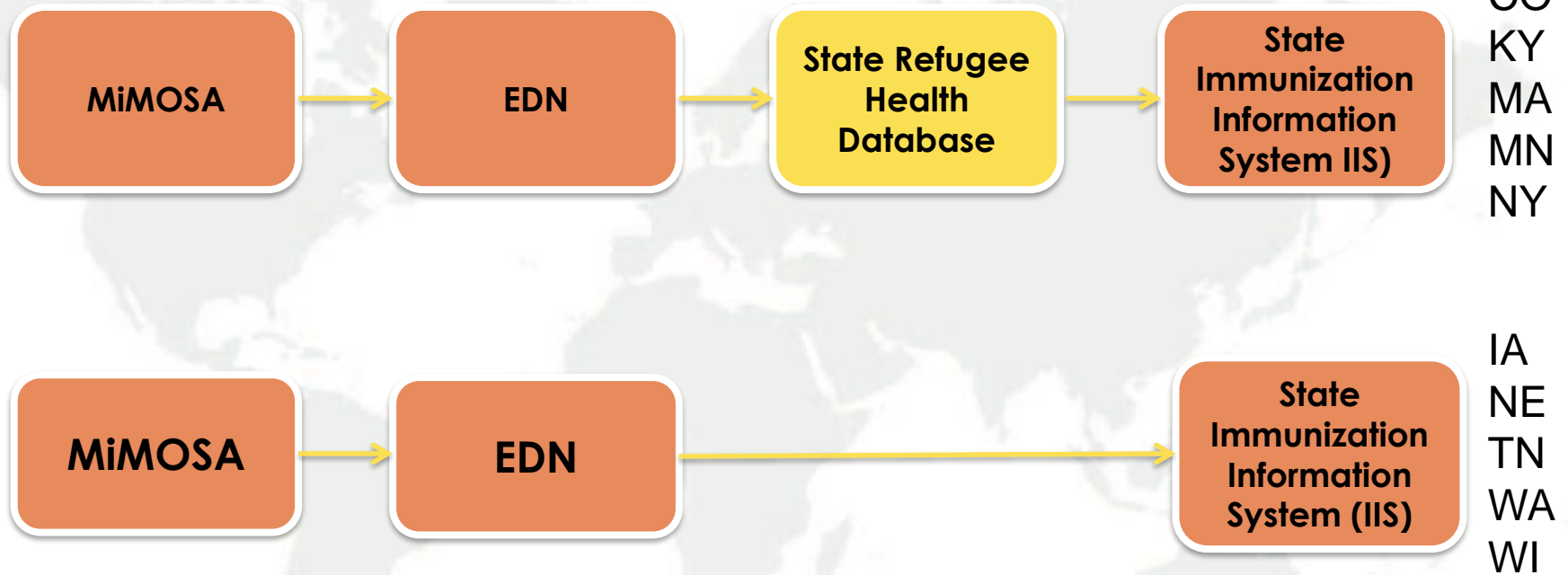
Refugee Family Organization contains base information such as Case File Number and official address



Refugee Health Assessment Sites

- Participate in the Vaccines for Children Program/MDPH Immunization Program
- Follow all adult and childhood vaccine schedules and guidelines from the MDPH Immunization Program and Advisory Committee on Immunization Practices (ACIP)
- Review current ACIP/MDPH Immunization Program recommendations for routine and catch-up vaccination of children and adults and requirements for school attendance.

Improving Overseas Immunization Information Uptake into State IIS



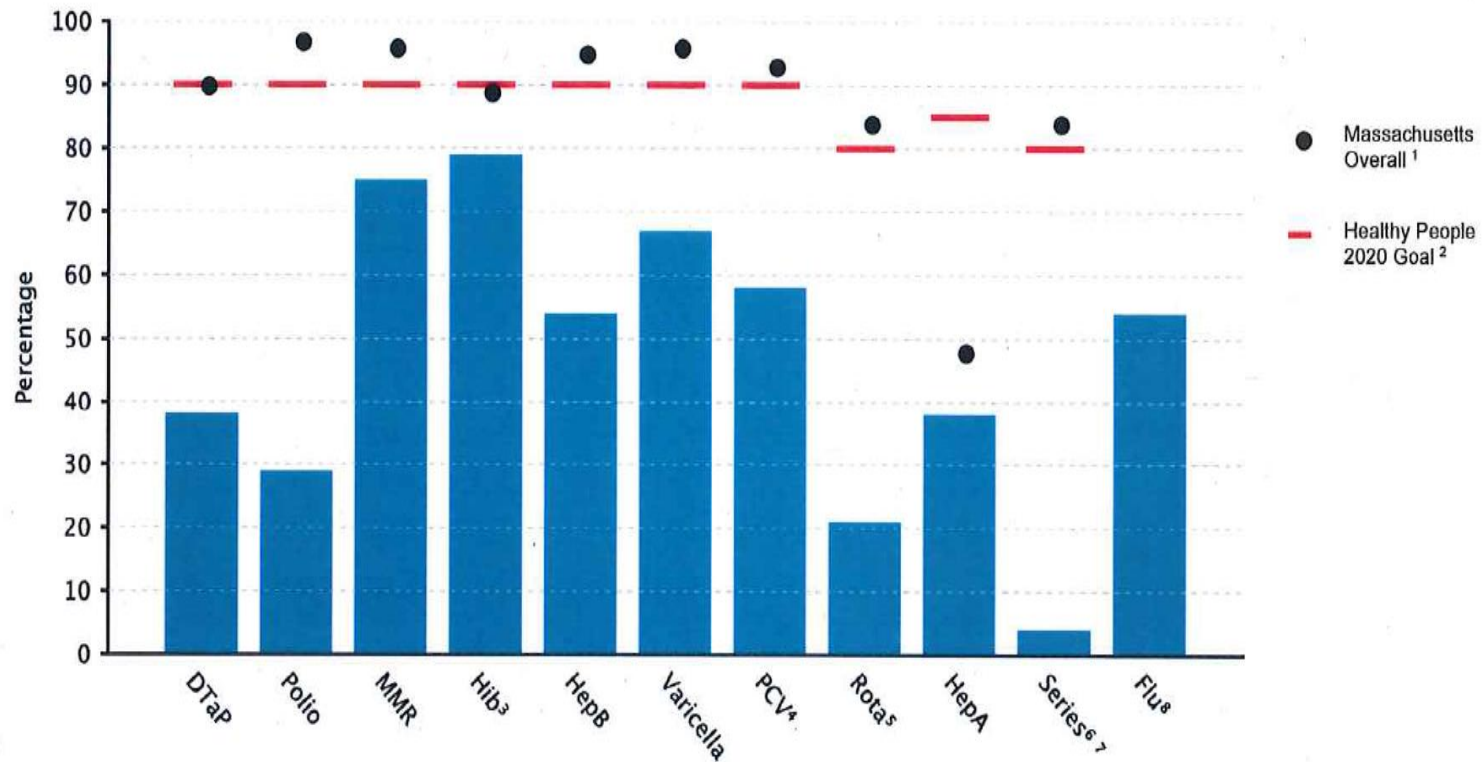
Partnership with Immunization Program

Sharing refugee immunization information:

- Overseas vaccinations:
 - Uploading overseas immunization information to MIIS since 2016
- Domestic health assessment:
 - Immunization information entered in MIIS by refugee resettlement sites since 2017

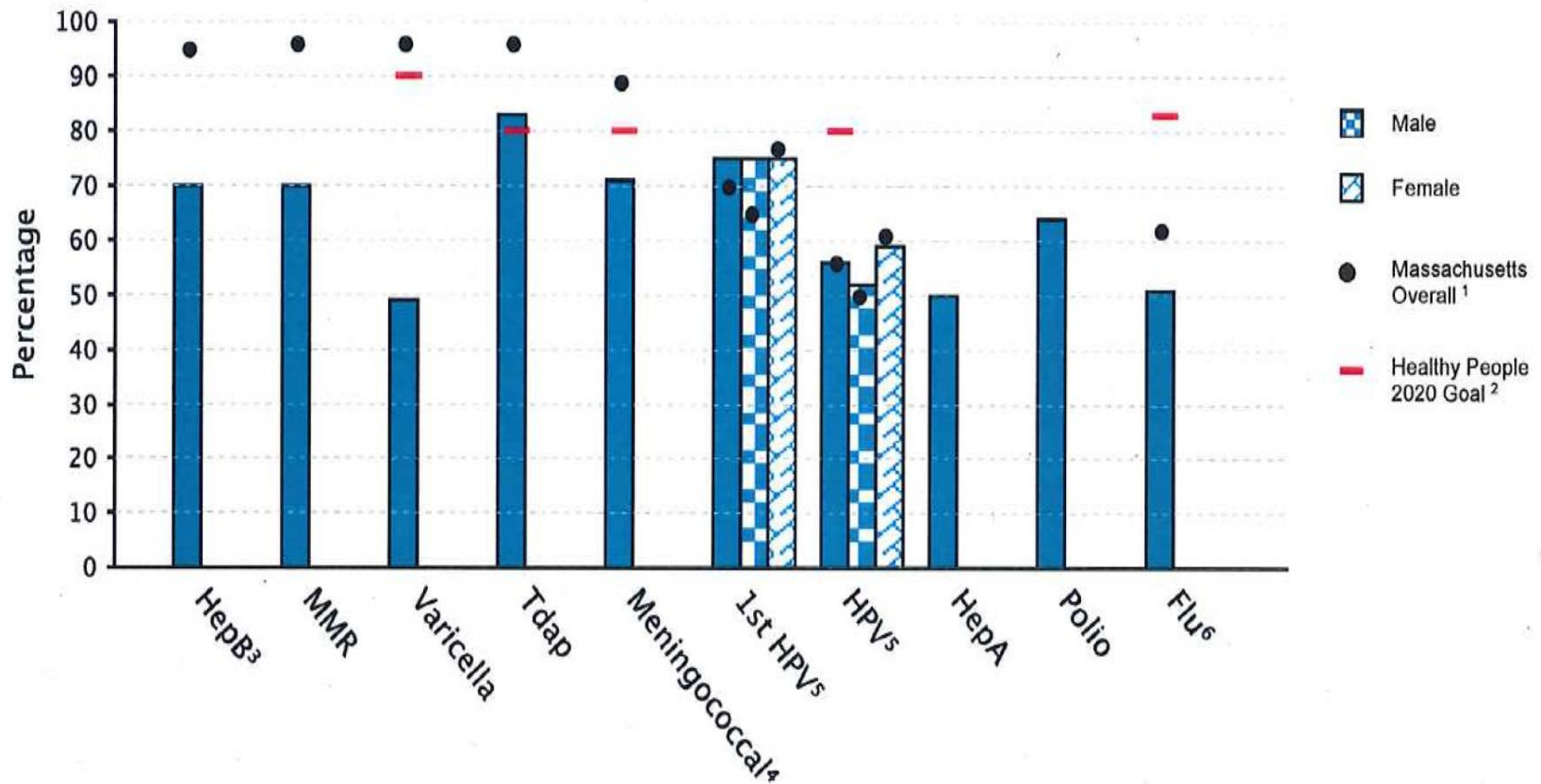
Childhood Coverage 24 Months to 34 Months (inclusive)

January 2016 through August 2018 as of 01/24/2019



Adolescent Coverage: Age 13 through 17 years (inclusive) (N=206)

January 2016 through August 2018: As of 01/24/2018



Immunization Coverage Report: School-age Kids (5 years – 18 years) (N=614)

| Vaccine Group | Count | Percentage | Number of Doses Evaluated |
|---------------|-------|------------|--|
| HepB | 388 | 63% | ≥ 3 Hepatitis B |
| DTaP | 327 | 53% | ≥ 1 Diphtheria Tetanus Pertussis |
| Polio | 578 | 94% | ≥ 1 Poliomyelitis |
| Tdap | 350 | 57% | ≥ 1 Tetanus Diphtheria Acellular Pertussis |
| Td | 305 | 50% | ≥ 1 Tetanus Diphtheria |
| MMR | 430 | 70% | ≥ 2 Measles Mumps Rubella |
| Varicella | 208 | 34% | ≥ 2 Varicella |
| All Antigens | 14 | 2% | Receipt of all the doses listed above |

Refugee Adjustment of Status Examination

- Timing: One year after U.S. arrival
- Vaccination requirements only*
 - Applicants are required to document vaccinations as recommended by the ACIP
 - Waivers for not age appropriate, contraindication, insufficient time interval, not flu season
- USCIS forms
 - Form I-693, Report of Medical Examination and Vaccination Record completed by Civil Surgeon [see <https://www.uscis.gov/i-693>]

**If refugee had Class A condition at arrival, full exam required.*

Immunizations Requirements: Adjustment of Status Applicants

Vaccine Requirements According to Applicant Age

| Vaccines by applicant age | Birth–1 month | 2–11 months | 12 months–6 years | 7–10 years | 11–17 years | 18–64 years | ≥65 years |
|-----------------------------|-------------------------------|---|---|------------------------------|--|-------------|--|
| DTP/DTaP/DT | NO | YES | | No | | | |
| Td/Tdap | NO | | | Sometimes* | YES (substitute 1-time dose of Tdap for Td booster; then boost with Td every 10 years) | | |
| Polio** (IPV/OPV) | NO | YES | | | | NO | |
| Measles, Mumps, and Rubella | NO | | YES, if born in 1957 or later | | | NO | |
| Rotavirus*** | NO | YES, 6 weeks to 8 months | NO | | | | |
| Hib | NO | YES, 2 through 59 months old | | NO | | | |
| Hepatitis A | NO | | YES, 12 through 23 months old | NO | | | |
| Hepatitis B | YES, through 18 years old | | | | | NO | |
| Meningococcal (MenACWY) | NO | | | YES, 11 through 18 years old | | NO | |
| Varicella | NO | | YES | | | | |
| Pneumococcal | NO | YES, 2 through 59 months old (administer PCV) | | NO | | | YES (administer either PCV or PPSV depending on vaccination history) |
| Influenza | NO, if less than 6 months old | | YES, ≥ 6 months (annually when flu vaccine is available in country of exam) | | | | |

DTP=pediatric formulation diphtheria and tetanus toxoids and pertussis vaccine; DTaP=pediatric formulation diphtheria and tetanus toxoids and acellular pertussis vaccine; DT=pediatric formulation diphtheria and tetanus toxoids; Td=adult formulation tetanus and diphtheria toxoids; Tdap=adolescent and adult formulation tetanus and diphtheria toxoids and acellular pertussis vaccine (*Children 7-10 years old sometimes need a dose of Tdap depending on their vaccine history. See [Diphtheria, Tetanus and Pertussis-Containing Vaccines Catch-Up Guidance](#) on CDC's website for additional information.); IPV=inactivated poliovirus vaccine (killed); OPV=oral poliovirus vaccine (live); Hib=*Haemophilus influenzae* type b conjugate vaccine; MenACWY=quadravalent meningococcal conjugate vaccine; PCV=pneumococcal conjugate vaccine; PPSV=pneumococcal polysaccharide vaccine.** Please see posted [Addendum to Technical Instructions for Panel Physicians for Vaccinations](#) on CDC's website for changing guidance about polio vaccine. ***Rotavirus vaccination should not be initiated for infants aged 15 weeks 0 days or older.

This table describes vaccine requirements for U.S. immigrant visa and status adjustment applicants only and does not include recommendations for other clinical purposes. See the [Immunization Schedules](#) on CDC's website for number and spacing of doses for required vaccines.



Refugee Health Assessment Challenges

- US health care system is all new to refugees
- Social adjustment over medical concerns (competing priorities)
- Refugees may move out of state soon after arrival
- Limited transportation
- Limited health literacy

Connections and Collaborations

- Refugee resettlement agency:
 - Makes connections with health assessment and assisting in integration of refugees in communities, providing case management support
- Department of Public Health:
 - Connects refugees to primary health care, mostly through community health centers.
- Community
 - Supports refugee integration for school entry, ESL and being welcoming community

Selected Resources

- U.S. Office of Refugee and Resettlement:
<https://www.acf.hhs.gov/orr/resources>
- U.S. Citizenship and Immigration Services:
<https://www.uscis.gov/humanitarian/refugees-asylum/refugees/united-states-refugee-admissions-program-usrap-consultation-worldwide-processing-priorities>.
- Centers for Disease Control and Prevention:
<https://www.cdc.gov/immigrantrefugeehealth/exams/medical-examination.html>.
- United Nations Higher Commission for Refugees:
<https://www.unhcr.org/en-us/about-us.html>.
- Massachusetts Department of Public Health: Refugee Health Assessment Program:
<https://www.mass.gov/refugee-health-assessment-program-rhap>.
- Refugee Health Technical Assistance Center:
<https://refugeehealthta.org/physical-mental-health/health-assessments/overseas-medical-exam/>.

References

- Council on Foreign Relations (CFR). Available at: <https://www.cfr.org/backgrounder/how-does-us-refugee-system-work>.
- United Nations Higher Commissioner for Refugees (UNHCR): The UN Refugee Agency. Available at: <https://www.unhcr.org/en-us/what-is-a-refugee.html>.
- International Organization for Migration (IOM). Available at <http://www.culturalorientation.net/providing-orientation/overseas/programs/rsc-east-asia/malaysia-image>.
- Centers for Disease Control and Prevention. Available at www.cdc.gov/immigrantrefugeehealth/exams/diseases-vaccines-included.html.
- CDC. Available at https://www.hhs.gov/sites/default/files/tab_7.1_cetron_nvac_refugee_vaccination_program%28ver_1_25_16%29.pdf.
- MPI. Analysis of State Department WRAPS data. Data for FY 2017 are partial and refer to resettlement between October 1, 2016 and April 30, 2017. Available at <https://www.migrationpolicy.org/article/refugees-and-asylees-united-states>.
- National Immigration Forum. Available at <https://immigrationforum.org/article/fact-sheet-u-s-refugee-resettlement/>.
- Children's Hospital of Philadelphia – PolicyLab. Available at <https://policylab.chop.edu/blog/what%E2%80%99s-continuum-care-overseas-arrival-us-refugees>.
- CDC: Available at <https://www.cdc.gov/immigrantrefugeehealth/pdf/Vaccine-Requirements-According-to-Applicant-Age.pdf>

Questions?

