

CSTE Border/International Health and Occupational Health Joint Webinar: Migrant Health in the U.S.

May 1, 2017
3:00-4:00 pm (ET)

Subcommittee Chair: Ken Komatsu, AZ
CSTE Staff: Meri Phillips



Council of State and Territorial Epidemiologists

Agenda



- Welcome
- CSTE announcements
- Migrant Health Presentation, Dr. Alfonso Rodriguez Lainz
- Future quarterly subcommittee calls
- Adjourn

CSTE Announcements



- The CSTE Annual Conference will be hosted in Boise, ID on **June 4-8, 2017**
- Executive board voting for active members will open **Thursday, May 4 through Thursday, May 18.**
 - Nominees can be found on the CSTE website under “Members Only” and then select “Executive Board Election”
 - Please note that votes emailed to CSTE staff or board members will not be counted

The Health of Migrant Workers in the U.S.



Alfonso Rodriguez-Lainz, PhD, DVM, MPVM
CDC/Division of Global Migration and Quarantine

CSTE Border/International Health Subcommittee (5/1/2017)

Outline

- Who are we taking about?
- Characteristics of the migrant workforce
- Health determinants for migrant workers
- Evidence on health of migrant workers
- Actions for consideration
- Conclusions

Migrant worker: Terminology challenges

- Multiple definitions (international and within U.S.)
- Terms used inconsistently, as synonyms and/or without being defined
 - Migrant, immigrant, migrant worker, farmworker, Hispanic

Terminology used in this presentation

- **International migrant (~Foreign-born)**
 - All persons with usual residence in a given country (e.g., U.S.) that were born in another country

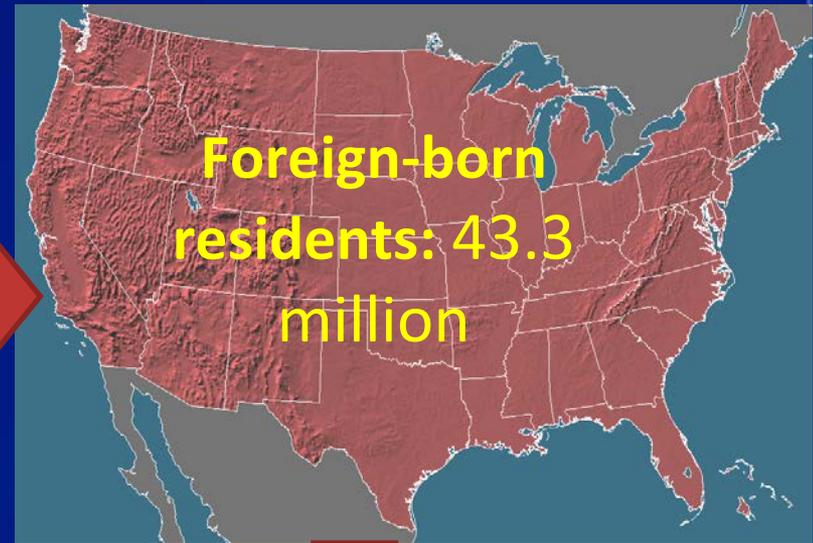


(Adapted from ILO, 2015)

International migrants in the U.S.: current residents vs. new arrivals and departures, 2015

New arrivals

- Permanent resident visa: 500,000
- Refugees: 70,000
- Temporary resident visa: 6.8 million
(e.g., high- & low-skilled workers, diplomats,
international students)
- Unauthorized migrants: ~100,000



Departures

- Voluntary return (300,000?)
- Deported (400,000)

Terminology used in this presentation

- **Migrant worker or foreign-born worker**
 - International migrants who are currently employed or seeking employment in their country of current usual residence (e.g., U.S.)
 - 26.3 million migrant workers in the U.S. (2015)



(Adapted from ILO, 2015)

Terminology used in this presentation

- **Farmworker**

- Individual employed in farmwork
 - (Different definitions of farmwork used by U.S. government agencies)
- ~1 million
- Most (73%) are foreign-born

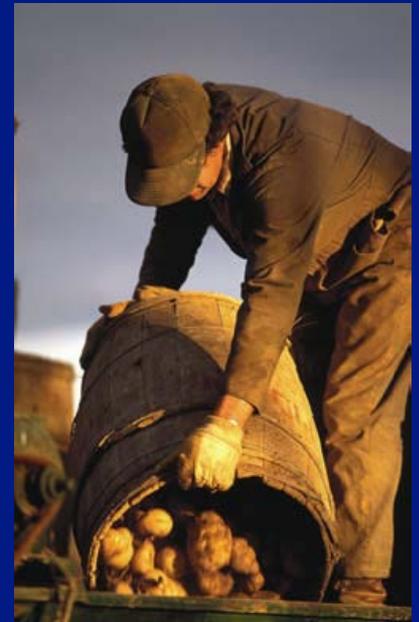


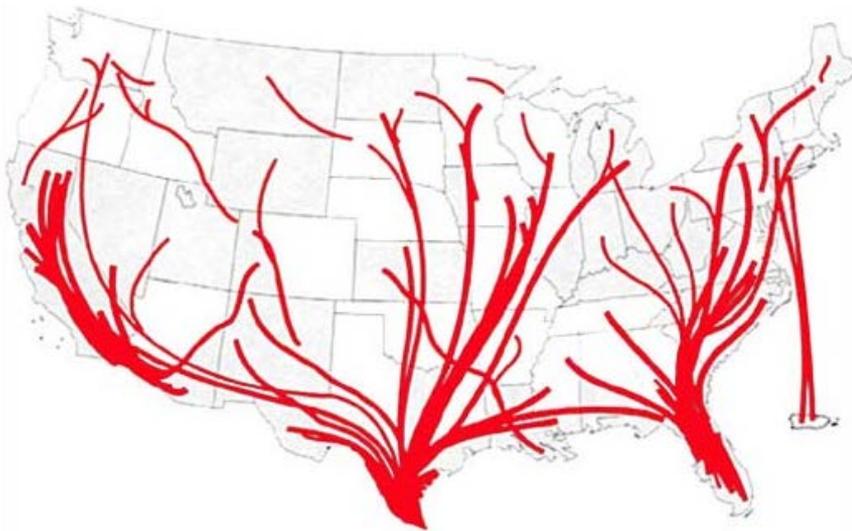
Photo credit : CDC/NIOSH

“Migrant” farmworker

- The term “migrant” is also frequently used to refer to farmworkers that need to travel within the U.S for work
- “Migrant” farmworker: farmworker required to be absent overnight from his/her permanent place of residence (U.S. Department of Labor)*

Historic vs. current farmworkers' work-related mobility patterns

“Historic”
“Migrant Streams”
1960's-1970's?



Source: Analysis of data from J.O. Diaz, R.T. Trottler III, and V.A. Rivera, Jr.,
“The Effects of Migration on Children: An Ethnographic Study, 1989”

Current mobility
patterns (2013-2014)*

- “Migrant”: 16%
- Follow-the crop: 4%
- Not “migrant”: 84%

**National Agricultural Workers Survey Tables
<https://www.doleta.gov/agworker/naws.cfm#d-tables>

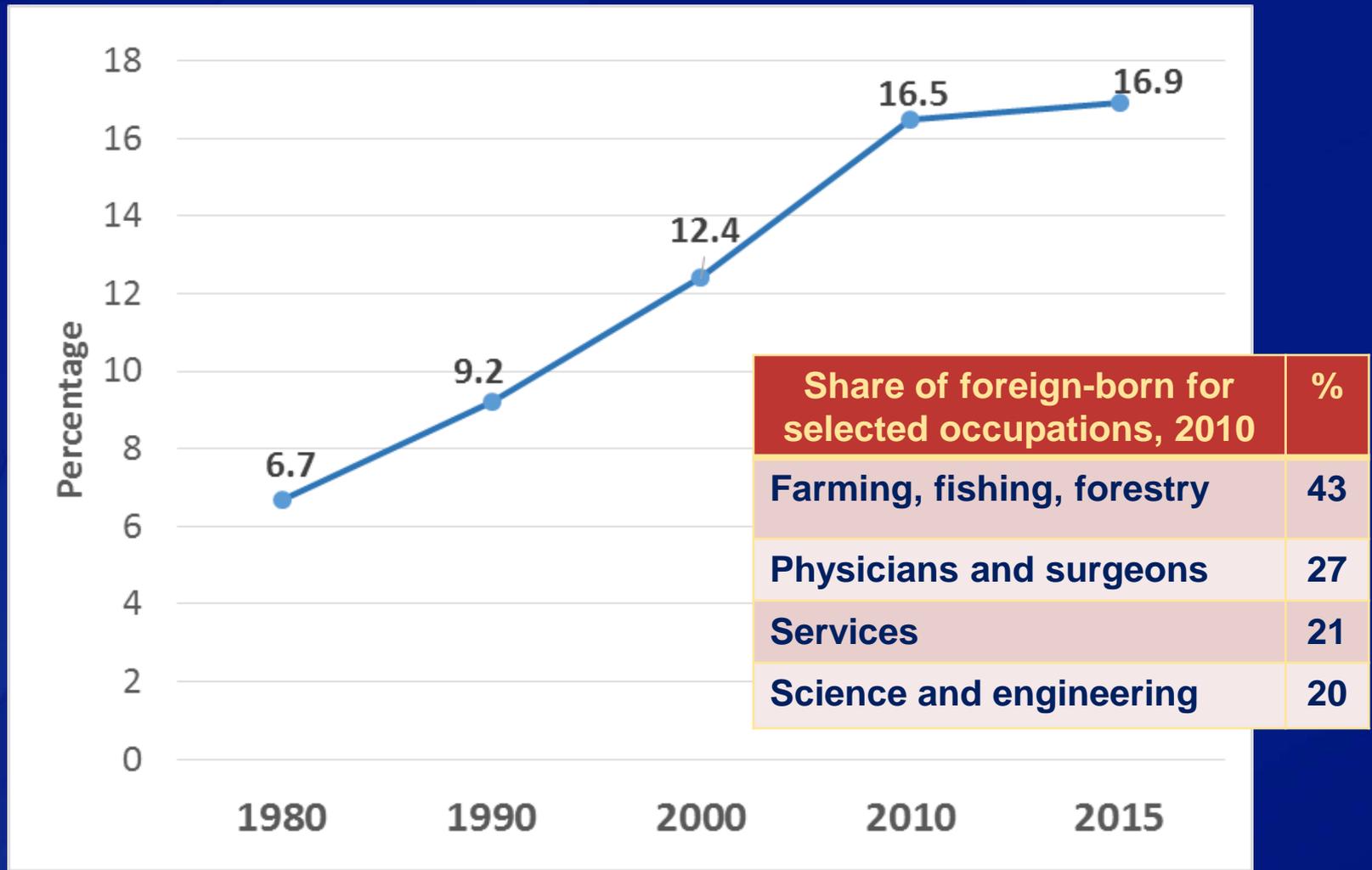
Characteristics of the foreign-born workforce in the U.S.

Great diversity of the foreign-born workforce in the U.S.

- Country of birth
- Time in the U.S.
- Education
- Economic status
- Occupation
- English proficiency
- Migration legal status (naturalized citizens, green cards, temporary work visas, unauthorized)
- Health



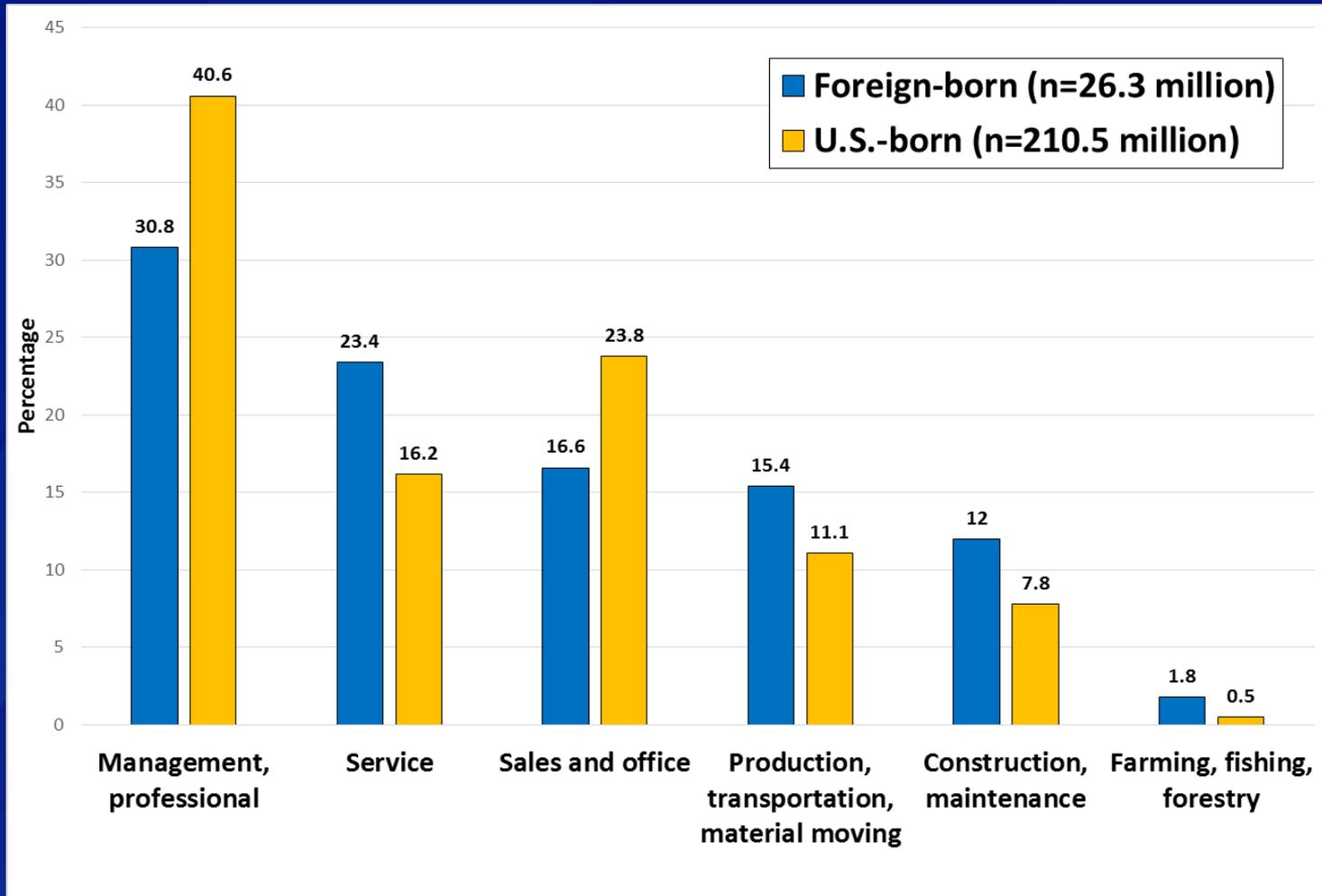
Foreign-born share of the U.S. civilian labor force, 1980 – 2015



U.S. civilian labor force characteristics by nativity, 2015

	Foreign-born	U.S.-born
Median weekly earning	\$681	\$837
Race/Ethnicity		
Hispanic	49%	10%
Asian	24%	2%
White	17%	73%
Black	9%	12%
Educational attainment (25+)		
Less than high school	23.9%	4.6%
Bachelor's degree & higher	34.9%	39.1%
Limited English proficiency (18+)	51%	1.4%
Unauthorized migrant	29%	-

Percentage of foreign- and U.S.-born persons (16+) by occupation, 2015



Sociodemographic characteristics of farmworkers*, U.S., 2013-2014

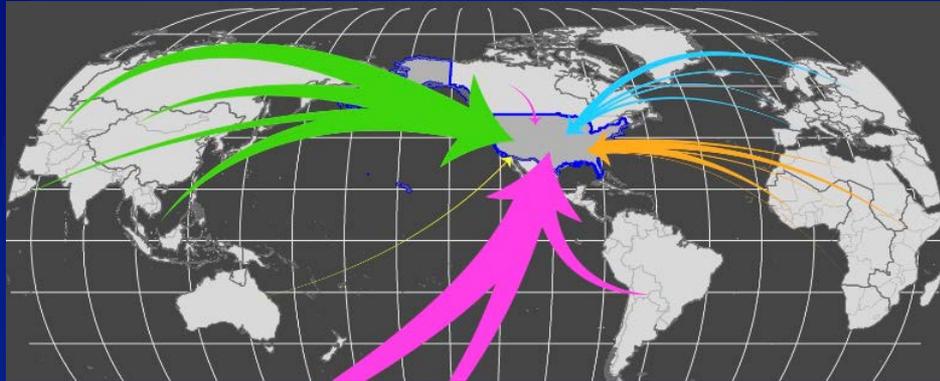
Men	72%
Average education level	8th Grade
Family income below poverty	30%
Limited English proficiency	70%
Unauthorized immigrants	47%
Average # of yrs in U.S.	18 yrs

*Includes U.S.- and foreign-born

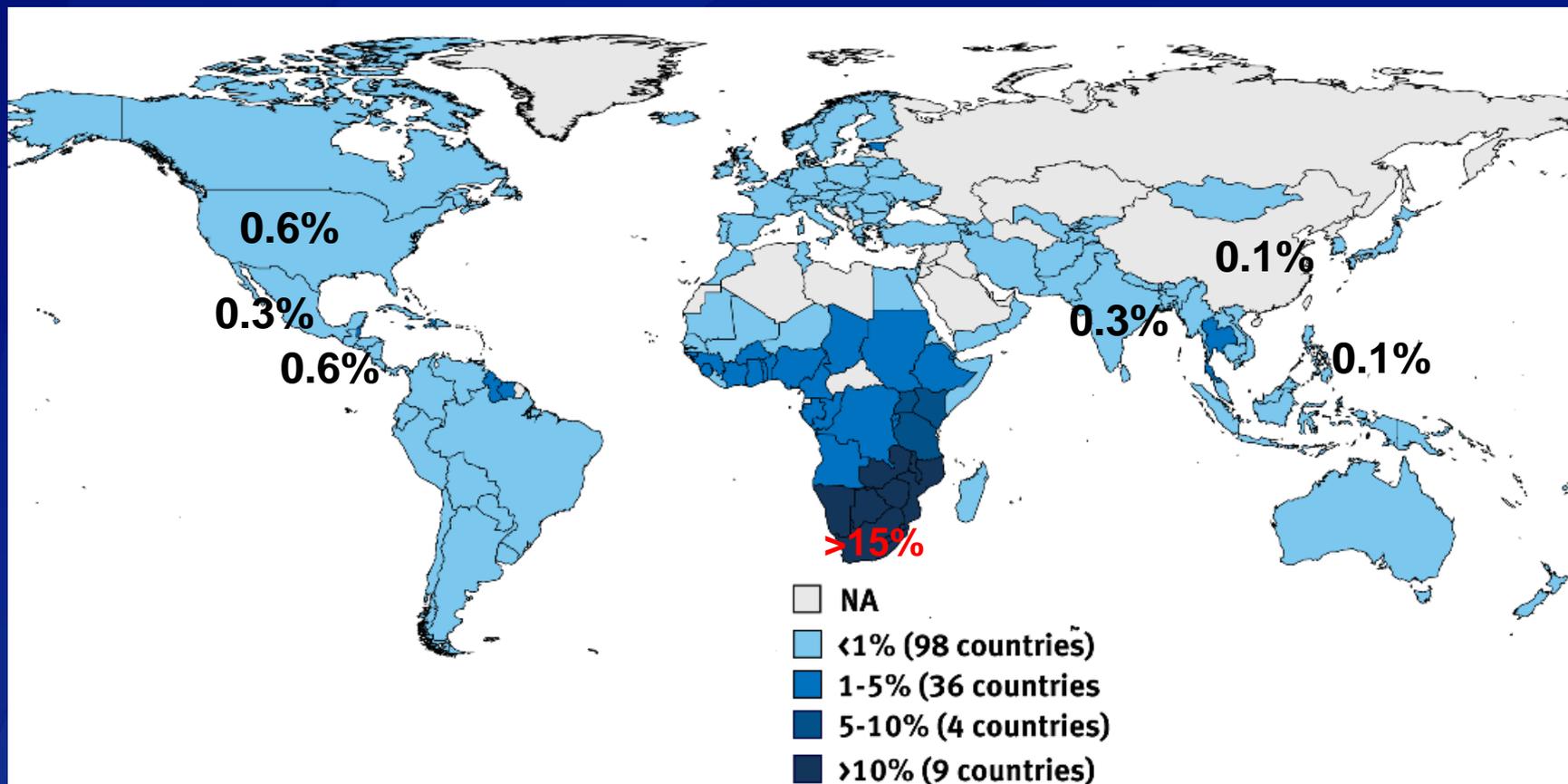
Source: U.S. Department of Labor, 2016b

Health determinants for migrant workers in the U.S.

Health determinants across the migration process



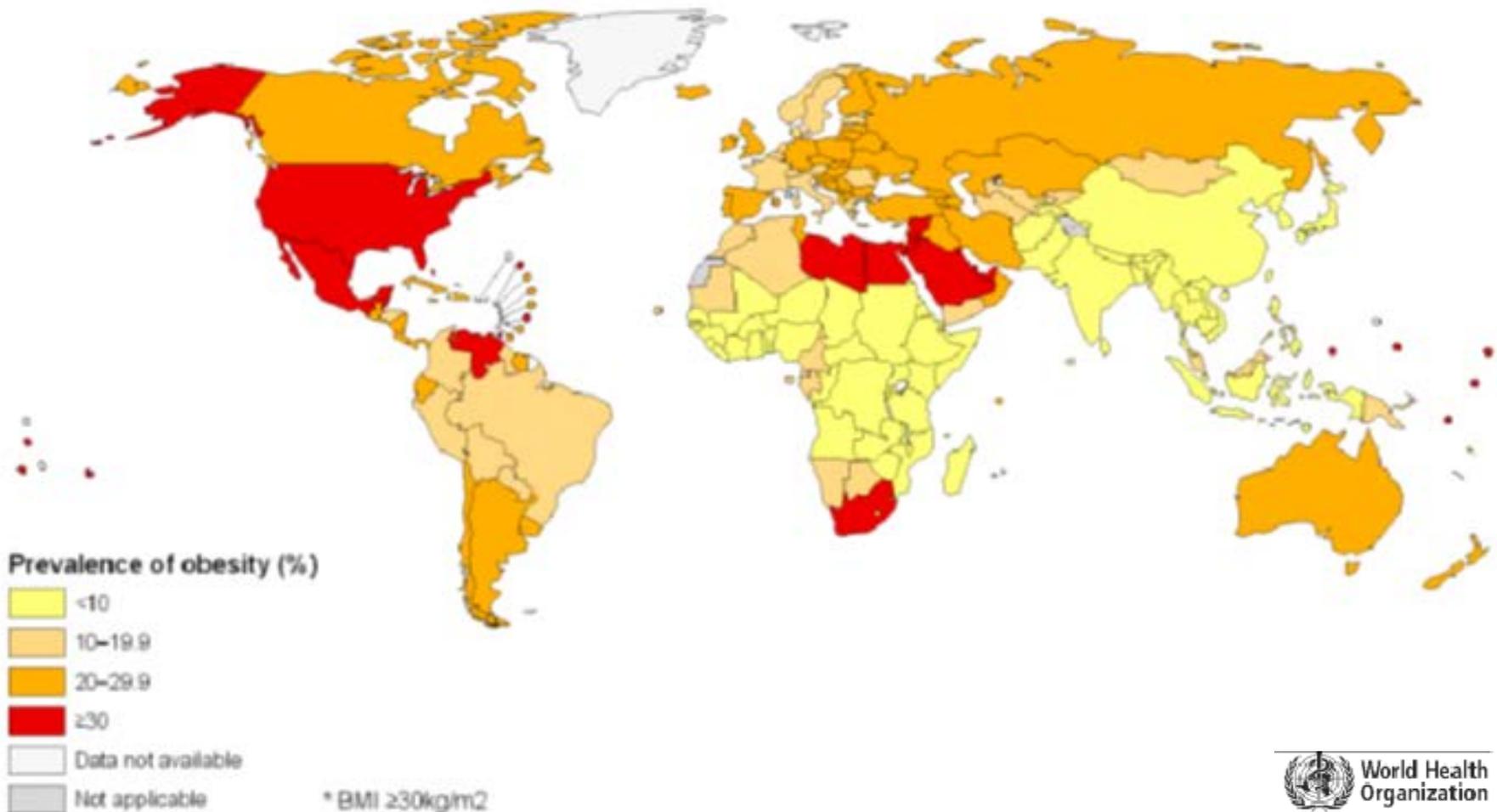
Adult HIV prevalence rate, 2012



NOTES: Data are estimates. Prevalence rates include adults ages 15-49. The estimate for Sudan represents data for South Sudan. An estimate was not provided for Sudan.

SOURCE: Kaiser Family Foundation, www.GlobalHealthFacts.org, based on UNAIDS, Report on the Global AIDS Epidemic; 2013.

Age-adjusted obesity* prevalence, ages 20+, both sexes, 2008



Disparities in social determinants of health for the foreign-born worker

- Compared to U.S.-born, more likely to be:
 - Racial/ethnic minority
 - Poor
 - Lower education
 - Limited English proficiency
 - Not U.S. citizen
 - Work on low skill/low paid jobs
 - Lower access to healthcare

Percentage with no health insurance among U.S. civilian workforce and farmworkers

	%
Overall civilian labor force (18-64 yrs old) (2015)*	
Foreign-born	31
U.S.-born	14
Farmworkers (2013-2014)**	65

*US Department of Labor, 2016a

**U.S. Department of Labor, 2016b

Highly vulnerable migrant workers: victims of labor trafficking

U.S. Department of Justice
Office of Justice Programs
National Institute of Justice



NATIONAL INSTITUTE OF JUSTICE **IN SHORT**

Thirty Percent of Migrant Laborers in San Diego Experience Trafficking Violations

Labor trafficking: restrictions imposed by employers on a worker's physical or communicative freedom, and/or actual or threatened assaults to a worker's physical body (e.g., beatings, imprisonment and sexual abuse)

Exhibit 1. Percent of Workers Experiencing Trafficking or Abuse

Occupation	Labor Trafficking Violations, %	Abusive Labor Practices, %
Construction	35	63
Janitorial/cleaning	36	59
Landscaping	27	60
Manufacturing	28	38
Food processing	32	51
Agriculture	16	27

Source: U.S Department of Justice, 2013

Evidence on health of foreign-born workers in the U.S.

Evidence on health of foreign-born workers in the U.S.

- Compared to U.S.-born:
 - Health advantages for some indicators
 - Health disparities for other indicators
- Great diversity in health by country of birth and other migration-related factors
- Limitations in available data

National public health monitoring data limitations (1)

1. Key migration-related variables not routinely collected

- e.g., country of birth, citizenship, yrs in the U.S.

2. High % of missing data for migration-related variables

- e.g., hepatitis B surveillance

Collection of migration-related data by U.S. surveillance programs (N=125)

Variable	%
Race	80
Ethnicity	82
Country of birth	32
Years in the U.S.	17
Language	10
Immigration status	11
Translated questionnaire	22

(Rodriguez-Lainz et al. Unpublished data)

National public health monitoring data limitations (2)

3. Some migration-relevant diseases not routinely monitored

- e.g., Chagas disease

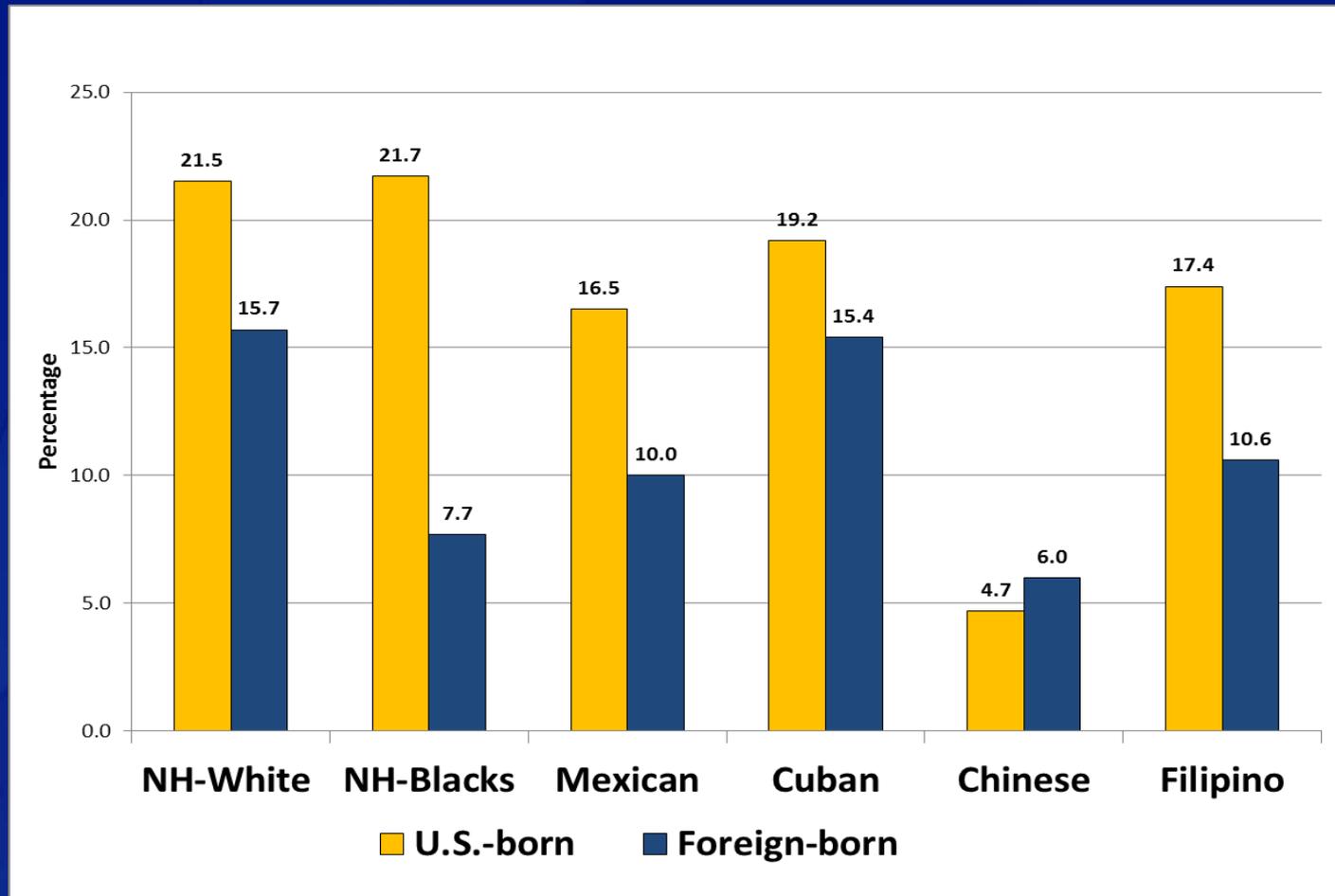
4. Some higher-risk populations may not be captured by health monitoring systems

- e.g., new arrivals, unauthorized, farmworkers, non-English speakers

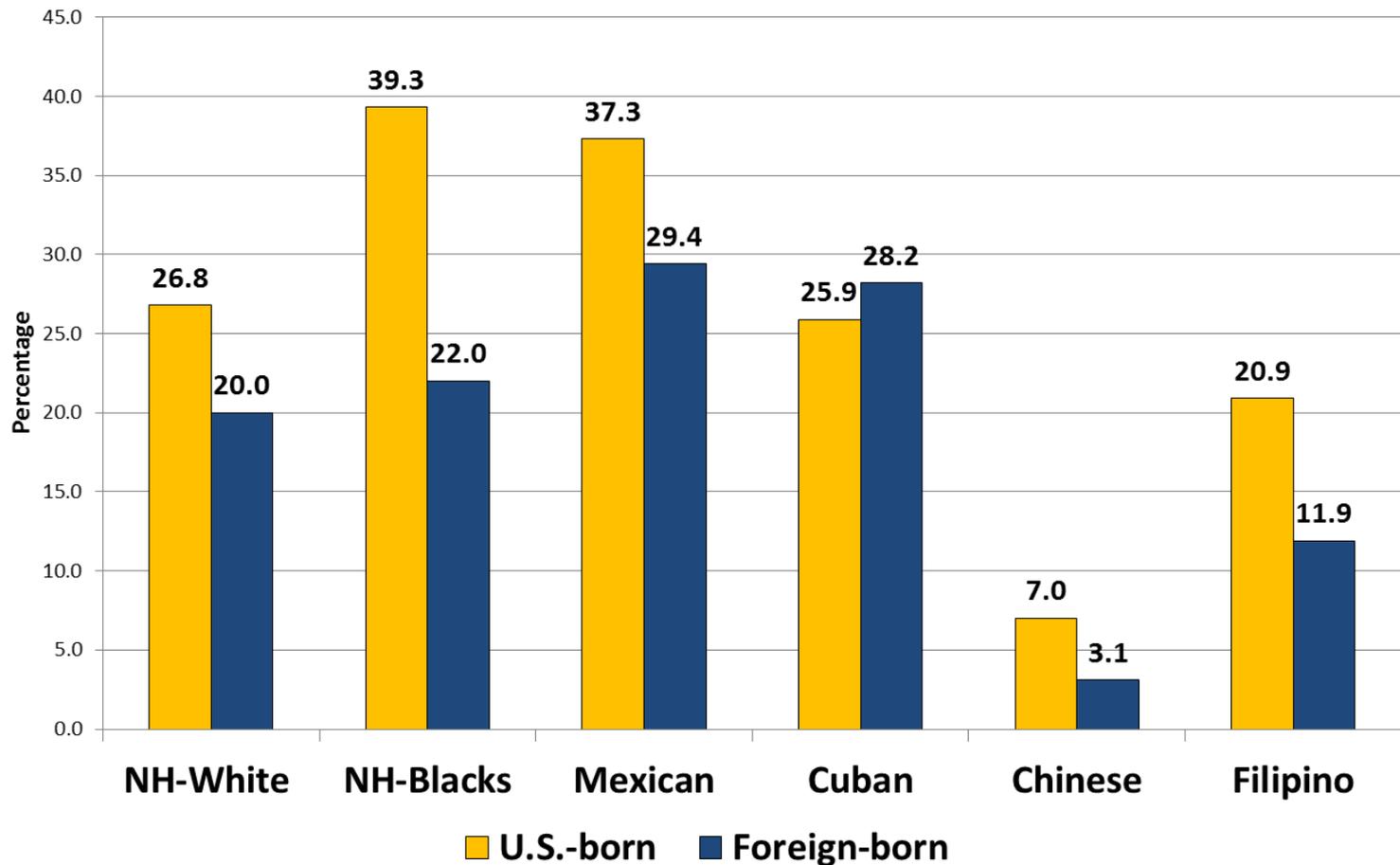
Health advantages

- Health advantages for some indicators compared to U.S.-born, in spite of disadvantaged socioeconomic status
 - Mental health
 - Substance use
 - Smoking
 - Obesity
 - Diabetes
 - Some cancers (e.g., lung, breast)

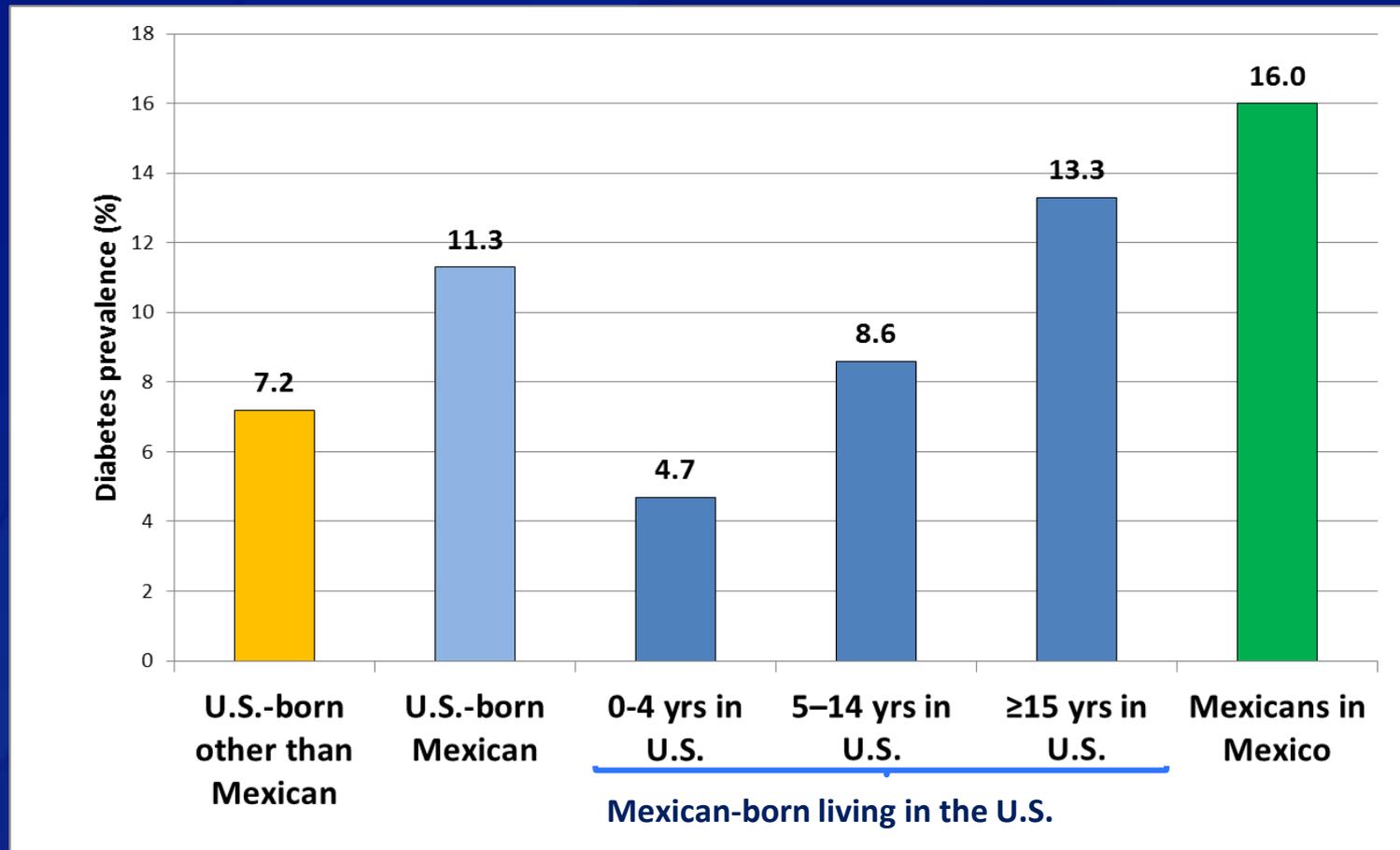
Prevalence of current smoking among U.S. adults by selected ethnic/nativity groups, NHIS 2007-2012



Prevalence for obesity (BMI>30) among U.S. adults (18+) by selected ethnic-nativity groups, NHIS, 2007-2012



Adjusted* diabetes prevalence, adults 30-60 yrs old

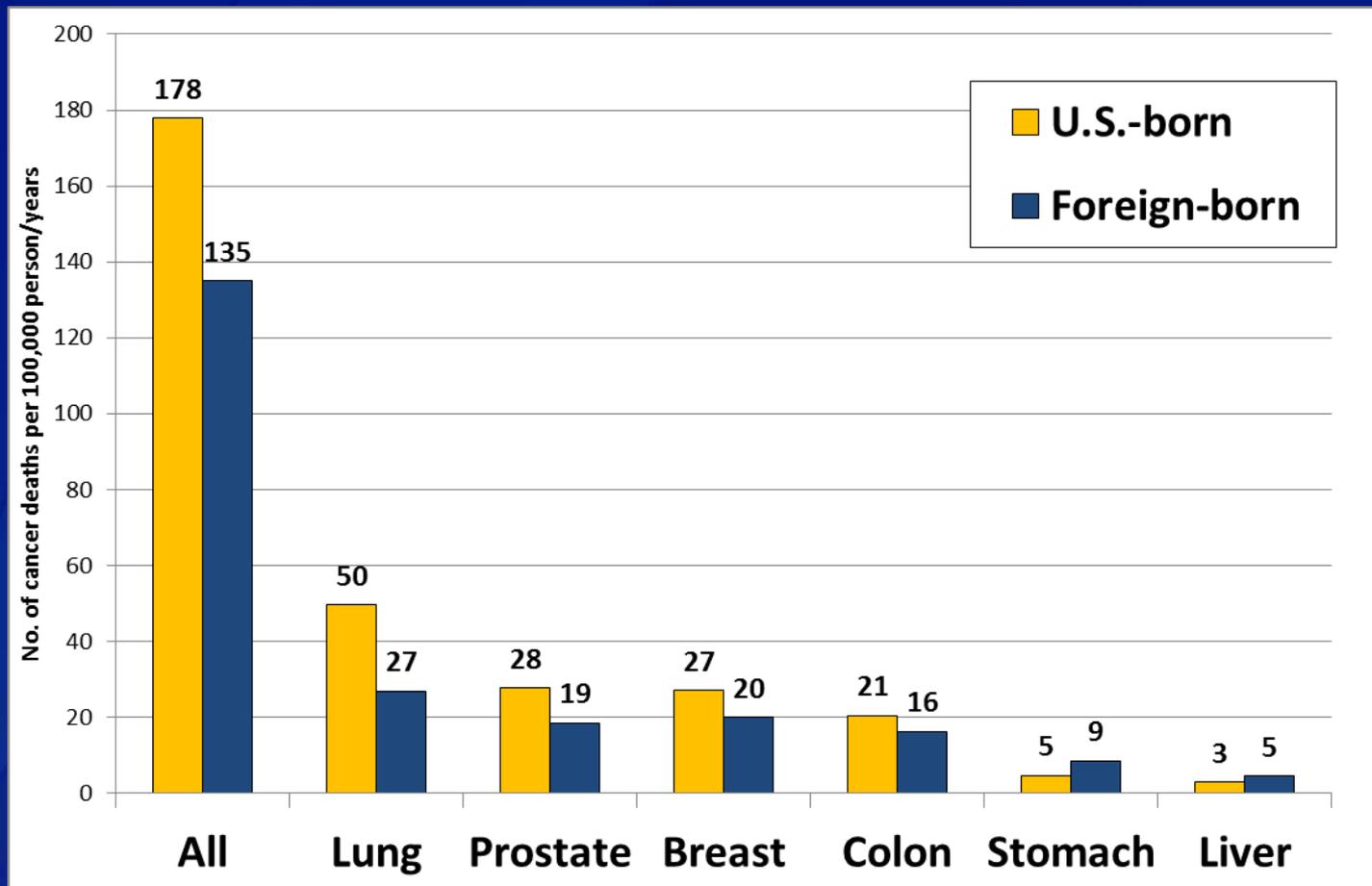


Source: Barcellos SH et al., 2012

*Age, gender, education, health insurance, smoking, obesity

Data sources: NHANES 1998-1994 & 1999-2008 and 2000 Mexican National Health Survey

Cancer mortality site-specific age-adjusted rates by nativity, 1980-1998



U.S. National Longitudinal Study

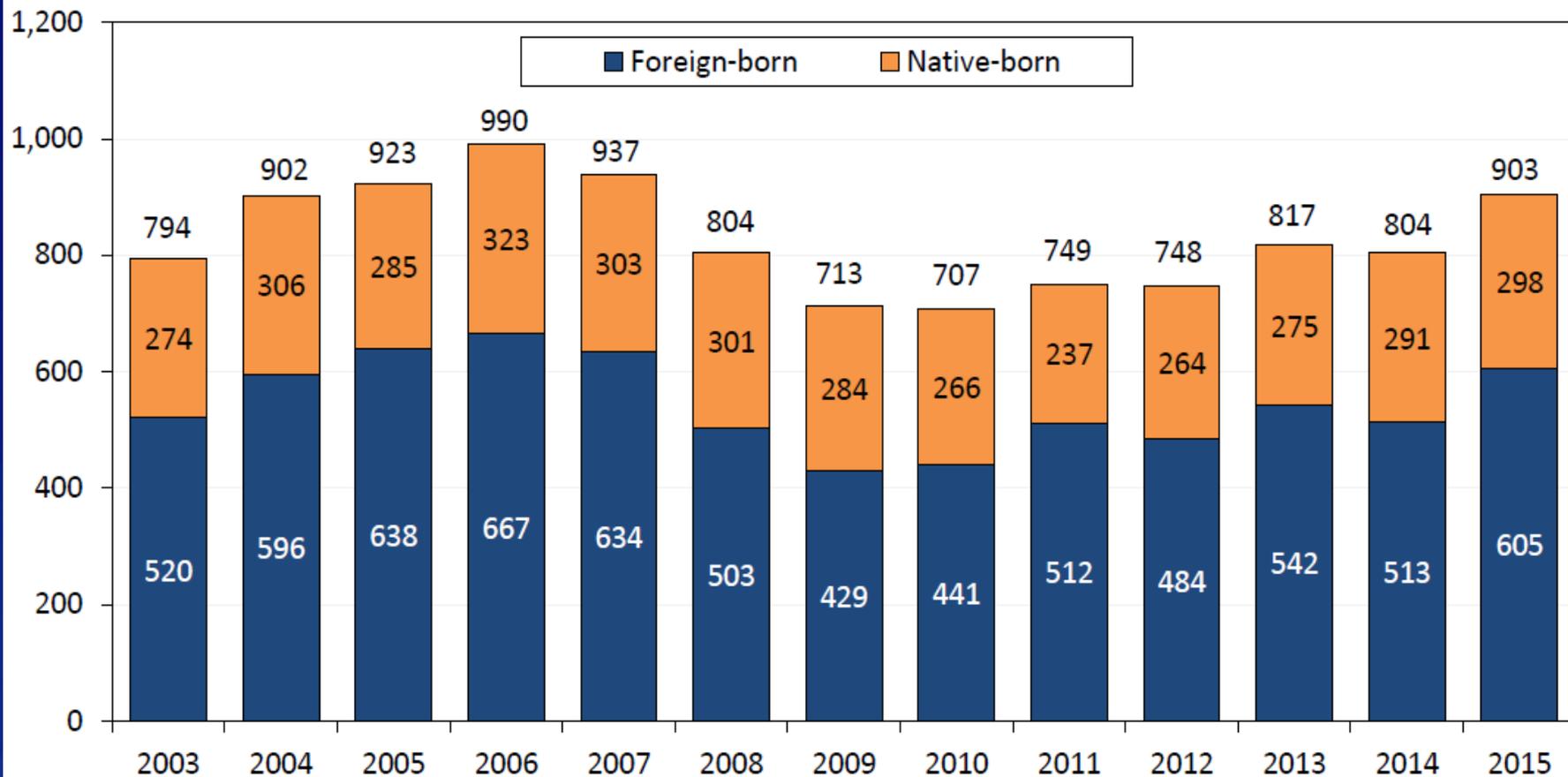
All differences statistically significant $p < 0.05$

Singh et al., 2013

Health disparities

- **Compared to U.S.-born, foreign-born adults experience disparities in:**
 - Some cancers (e.g., cervical, stomach, liver)
 - Occupational health
 - Infectious diseases

Fatal work injuries involving Hispanic workers by nativity, 2013-2015



Source: U.S Bureau of Labor Statistics, 2016

Occupational health problems among farmworkers

“A textbook of occupational disease”

- Injuries: acute and cumulative
- Respiratory disease
- Dermatologic disease
- Heat stress
- Cancer
- Adverse reproductive outcomes
- Neurologic disease
- Pesticide illness (acute, chronic)
- Others

Incidence rates for acute pesticide-related illness and injuries by occupation, 1998–2007

Occupation in the agricultural industry	Incidence rate per 100,000 (FTEs)
Farmworker	67.2
Other agricultural occupations	42.9
Farmer	4.9

NOTE: No information available by country of birth

Farmworkers' chronic disease burden, California, 1999

- **High prevalence of indicators of chronic disease**
 - High blood pressure (males only) (27%)
 - High cholesterol levels (males only) (17%)
 - Obesity (29% males; 38% females)
 - Anemia (4-8% of males)
 - Decayed teeth (36% males; 29% females)

Evidence on infectious disease disparities (1)

- Foreign-born from higher endemicity countries may represent a disproportionate share of cases diagnosed in the U.S.
 - TB, *M. bovis*, HIV, typhoid fever, Hansen's disease, cysticercosis*
- May develop disease years after arrival (e.g., TB, Chagas disease, cysticercosis)

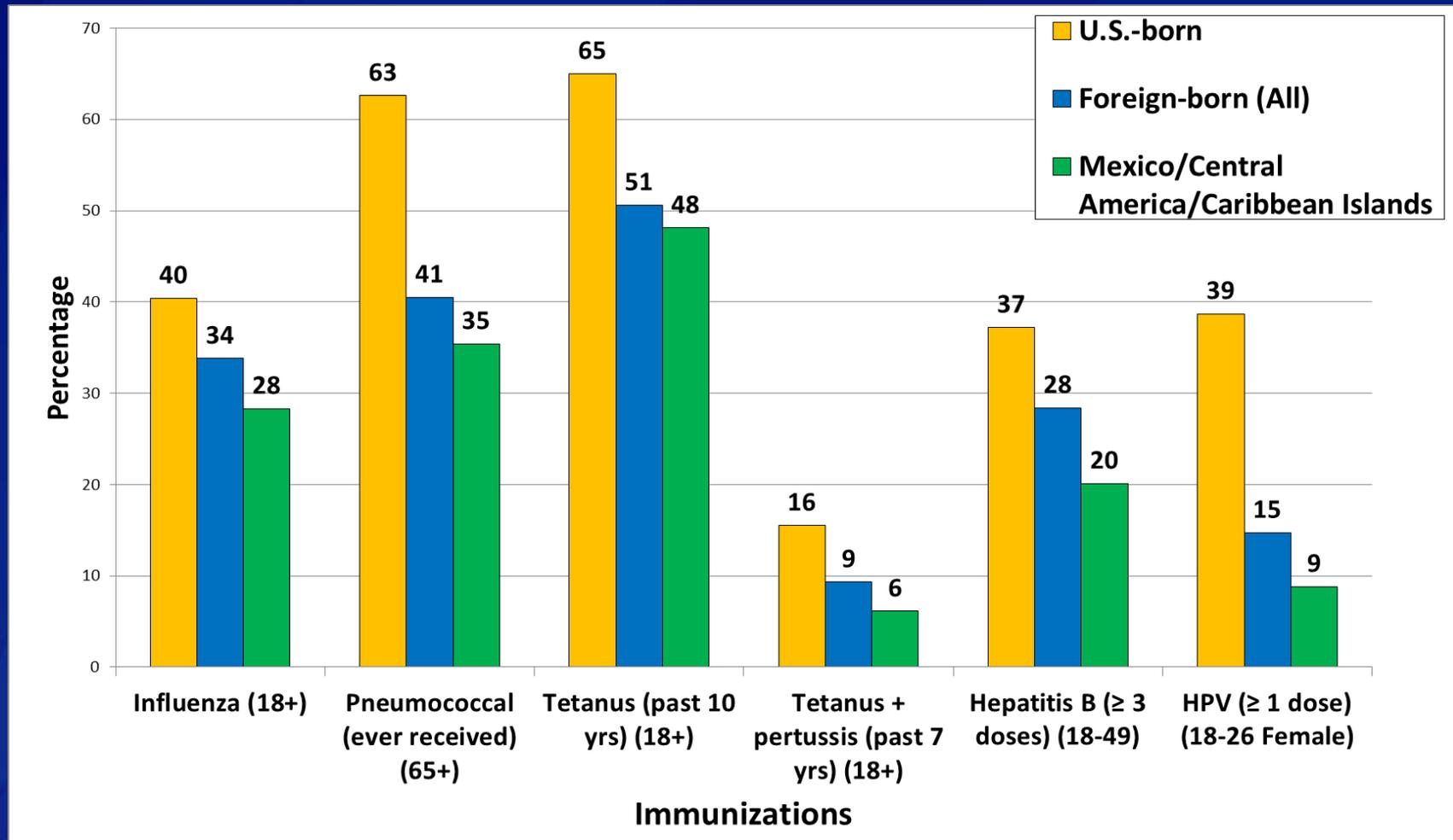
Evidence on infectious disease disparities (2)

- Some diseases could also be acquired in the U.S.
 - HIV, TB, listeriosis
- Risk factors may be different than U.S.-born population
 - Higher % of heterosexual HIV transmission
 - Consumption of Mexican-style unpasteurized cheese as risk factor for listeriosis

Evidence on infectious disease disparities (3)

- Lower access to infectious disease preventive services, testing, and treatment
 - Cervical cancer screening
 - Timely diagnosis for TB and HIV
 - Completion of TB treatment
 - Adult vaccinations

Adult vaccination coverage by country of birth, NHIS, 2012



Infectious diseases associated with migration but with limited data for the foreign-born

- **Vaccine preventable** (hepatitis A, measles, mumps, rubella, varicella, HPV)
- **Vector-borne** (malaria, dengue, Chikungunya, Zika)
- **Food-borne** (brucellosis, listeriosis)
- **Other STIs** (syphilis, gonorrhea)
- **Hepatitis B, C, D**
- **Histoplasmosis***
- **Parasitosis** (amebiasis*, strongyloidiasis*, leishmaniasis*, schistosomiasis*, Chagas disease*, taeniasis*)

*Disease not nationally notifiable

Evidence on spread of infectious diseases to the U.S.-born population

- Limited evidence
 - Some evidence for TB
- Limited # of outbreaks associated with immigrants
 - Malaria outbreak in San Diego Co. (1988, 1989)
 - TB among Guatemalans in Tennessee (2007)
 - Outbreaks in immigrant detention centers (e.g., measles, varicella, scabies)

Actions for consideration

(Based on guidance from national public health organizations and researchers)

Implement Existing Guidelines

1) 2011 HHS Data Standards

call for collection and reporting of:

- ✓ Granular (sub-group specific) race and ethnicity data
- ✓ Language spoken at home and English-speaking ability

<http://aspe.hhs.gov/datacncl/standards/aca/4302/index.pdf>

Implement Existing Guidelines

2) HHS National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care

Promote culturally and linguistically appropriate data collection and services

- ✓ Translation and cultural validation of data collection instruments
- ✓ Provide interpreters for LEP individuals

<https://www.thinkculturalhealth.hhs.gov/pdfs/EnhancedCLASStandardsBlueprint.pdf>

Additional Data Standards

3) Collection and reporting of:

- ✓ Place of birth
- ✓ Years in the U.S
- ✓ All the above variables about parents for children data collection
- **Suggest using U.S Census Bureau questions**

Conclusions (1)

- The foreign-born is an increasing share of the U.S. workforce and total population
- The foreign-born experience disparities in social determinants of health, infectious diseases, occupational health, access to care, among others
- Enhanced surveillance and targeted interventions are needed

Conclusions (2)

- Addressing the health needs of the foreign-born population can help advance the national health goal of eliminating health disparities and protecting the health of all communities in the U.S.

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Disclaimer:

The findings and conclusions in this presentation are those of the author and do not necessarily represent the views of the CDC

Quarterly Subcommittee Calls for 2017



- **August 7, 2017 at 3:00 pm (ET)**
 - We will be hearing from Dr. Javier Montiel Perdomo, Director of Epidemiology at the Ministry of Health in Mexico City who will be discussing Mexican Surveillance Systems
- **November 6, 2017 at 3:00 pm (ET)**

Thank you for your participation!

- Please complete the webinar evaluation: https://cste.co1.qualtrics.com/jfe/form/SV_8eIPBqmM0hDOrdP
- The webinar recording & slides will be available on CSTE's website in the webinar library: <http://www.cste.org/?page=WebinarLibrary>