US DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION
National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention
Division of Tuberculosis Elimination

Virtual Meeting of the
Advisory Council for the Elimination of Tuberculosis
August 20, 2019

Record of the Proceedings

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ADVISORY COUNCIL FOR THE ELIMINATION OF TUBERCULOSIS
August 20, 2019

Minutes of the Virtual Meeting

The United States (US) Department of Health and Human Services (HHS) and the Centers for Disease Control and Prevention (CDC), National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention (NCHHSTP), Division of Tuberculosis Elimination (DTBE) convened a virtual meeting of the Advisory Council for the Elimination of Tuberculosis (ACET). The proceedings were held on August 20, 2019 beginning at 10:00 a.m. EST.

ACET is formally chartered under the Federal Advisory Committee Act (FACA) to provide advice and recommendations to the HHS Secretary, HHS Assistant Secretary for Health, and CDC Director regarding the elimination of tuberculosis (TB). The charter authorizes ACET to make recommendations regarding policies, strategies, objectives and priorities; address the development and application of new technologies; provide guidance and review on CDC's TB Prevention Research portfolio and program priorities; and review the extent to which progress has been made toward TB elimination.

Information for the public to attend the virtual ACET meeting via webinar or teleconference was published in the *Federal Register* in accordance with FACA regulations and rules. All sessions of the meeting were open to the public (*Attachment 1: Participants' Directory*).

Opening Session

Hazel Dean, ScD, DrPH (Hon), MPH, FACE
Deputy Director, National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention
Centers for Disease Control and Prevention
ACET Designated Federal Officer (DFO)

Dr. Dean called the meeting to order at 10:00 am EST, welcomed participants, and conducted a roll call to confirm the attendance of the ACET voting members, *ex-officio* members, and liaison representatives. She announced that ACET meetings are open to the public and all comments made during the proceedings are a matter of public record. She informed the ACET voting

members of their responsibility to disclose any potential individual and/or institutional conflicts of interest (COI) for the public record and recuse themselves from voting or participating in these matters.

ACET Voting Member (Institution/Organization)	Potential Conflict of Interest
Lisa Armitige, MD, PhD (Heartland National Tuberculosis Center)	No conflicts disclosed
Robert Belknap, MD (Denver Metro Tuberculosis Control Program)	No conflicts disclosed
Barbara Cole, RN, MSN, PHN (Riverside County Department of Public Health)	No conflicts disclosed
Jennifer Flood, MD, MPH (California Department of Public Health)	No conflicts disclosed
David Horne, MD, MPH (University of Washington School of Medicine)	No conflicts disclosed
Robert Horsburgh, Jr., MD, MUS (Boston University School of Public Health)	No conflicts disclosed
Lixia Liu, PhD, MP, (ASCP), D(ABMM) (Indiana State Department of Health)	No conflicts disclosed
Kristine Stewart-East (Advocate for Tuberculosis)	No conflicts declared
Zelalem Temesgen, MD (Mayo Clinic Center for Tuberculosis)	No conflicts declared

The roll call confirmed that the 18 voting members and *ex-officio* members in attendance constituted a quorum for ACET to conduct its business on August 20, 2019.

Dr. Dean made several announcements regarding the changes that have occurred in ACET's membership since the previous meeting in April 2019:

- The participants were asked to welcome the following new ACET members to their first meeting:
  - Ms. Kristine Stewart-East, who is the Advocate for Tuberculosis and is the new ACET member who replaces Dr. Jeffrey Starke, who rotated off of ACET as of June 30, 2019. A few years back, ACET proposed and the membership agreed that a member would be added who is a TB Advocate.
  - Dr. Kathleen Ritger with the Chicago Department of Public Health (CDPH), who will serve as the liaison representative for the National Association of County and City Health Officials (NACCHO). Dr. Ritger replaces Dr. Robert Benjamin.
  - Dr. Julie Higashi with the Los Angeles County TB Program, who will serve as a liaison representative for the National Tuberculosis Controllers Association (NTCA). She replaces Ms. Diana Fortune.
  - Ms. Nuala Moore with the American Thoracic Society (ATS). She replaces Ms. Fran Dumelle who retired from ATS on June 28, 2019.
- CDC sent a letter to the Substance Abuse and Mental Health Services Administration (SAMHSA) with a request to identify a replacement for Dr. Anthony Campbell, who is no longer with SAMHSA.

- CDC sent a letter to the HHS Office of Minority Health (OMH) with a request to identify a new *ex-officio* member to replace Dr. Matthew Lin.
- CDC sent a letter to the Agency for Healthcare Research and Quality (AHRQ) in October 2018 with a request to identify a new *ex-officio* member to replace Ms. Kali Crosby.
- CDC sent a letter to the HHS Office of Global Affairs (OGA) on April 25, 2018 with a request to identify a new *ex-officio* member for the US Section of the US-Mexico Border Health Commission (USMBHC).

Barbara Cole, RN, MSN, PHN, ACET Chair
TB Controller
Riverside County (California) Department of Public Health

Ms. Cole also welcomed the participants to the virtual ACET meeting, and reviewed the key agenda items.

NCHHSTP Director's Report

Jonathan Mermin, MD, MPH (RADM, USPHS)
Director, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Centers for Disease Control and Prevention

Dr. Mermin indicated that with regard to the considerable discussion focused on TB screening and testing of US healthcare personnel (HCP), "Tuberculosis Screening, Testing, and Treatment of US Health Care Personnel: Recommendations from the National Tuberculosis Controllers Association and CDC, 2019" was published in the May 17, 2019 *Morbidity and Mortality Weekly Report* (*MMWR*). These updated recommendations indicate that TB screening, including TB risk assessment, should occur upon hire. Annual TB testing is not recommended unless there is a known exposure or ongoing transmission in a healthcare facility. Also recommended is that HCP with latent TB infection (LTBI) should receive preventive treatment. Hopefully, these updated recommendations will encourage what is thought to be effective and cost-effective TB screening and treatment and discourage unnecessary testing.

In terms of other parts of NCHHSTP, a study examining men who have sex with men (MSM) who are at risk for extragenital sexually transmitted diseases (STDs) was published in the April 12, 2019 *MMWR*. This study found that there was a fairly high proportion of MSM, about 1 in 8, who had either chlamydia or gonorrhea in their throat or rectum. About a third had not been screened in the last 12 months at all, let alone extragenitally. Essentially, these results emphasize that urethral assessment alone is missing a fair amount of extragenital STDs. Not only does this increase the potential for complications among the individuals involved, but also it increases the potential for ongoing transmission of STDs. There is a lot of interest in arranging for methods to obtain reimbursement for extragenital STD screening, versus what is currently occurring with many insurance companies that think they are being triple billed when they see three different tests. The FDA recently approved one test for this purpose, which may assist with insurance reimbursement. CDC recently updated some translated STD fact sheets that are available in Spanish, Chinese, Vietnamese, Russian, and Haitian Creole.

There continues to be an ongoing multi-state outbreak of hepatitis A virus (HAV) infections. As of August 9, 2019, there had been 24,000 cases; over 14,000 hospitalizations; and close to 250 deaths. This has been very difficult and challenging to control for individual states and CDC. It

takes about a year to a year and a half for states that have a large outbreak, defined as over 1000 to 2000 cases, to get it under control. It has been difficult to bring vaccination to the people who need it, because there is not an ongoing large pipeline of resources for adult HepA vaccination. It takes time for states to get resources in place to do that. Aside from assisting multiple states with placement of individuals who are almost full-time on this activity, there are ongoing calls and technical assistance (TA) support for the states. CDC has developed new resources that can be tailored with local information. This includes fact sheets on HAV risk for people who use drugs, MSM, and other at-risk populations and posters with a "Get Vaccinated" message. The hepatitis C virus (HCV) state policy simulator is a CDC-funded tool for state policymakers and practitioners that aids in decision-making on policies, strategies, investments, and return on investment (ROI) related to HCV. This tool stimulates the potential impact of different screening and treatment policies and cost drivers, especially if treatments are safer but are still relatively expensive.

CDC has awarding funds for HBV and HCV testing, diagnosis, and harm reduction. First, $4 million will be awarded for "Improving Hepatitis B and C Care Cascades: Focus on Increased Testing and Diagnosis." This funding opportunity will support programs to be provided in state and local jurisdictions; and offered in health care systems, substance use treatment settings, syringe services programs (SSPs), and correctional facilities. In addition, over $6 million has been awarded to ensure that services provided for people who use drugs are evidenced based and comprehensive. This program will strengthen the capacity of harm reduction programs; fund demonstration projects for patient navigation at SSPs and surveillance of injection drug use; and implement an SSP monitoring and evaluation. The world for SSPs has changed dramatically over the past two years. Not only is CDC now able to support most components of SSPs with federal resources other than injection equipment itself, but also there has been a great increase in the number of SSPs. For example, Kentucky had none 3 years ago and now has 60. Multiple states are now changing their regulations, so CDC wants to have a system in place that can both engage with SSP programs to help support them and monitor the types of interventions they are implementing and how many clients they are serving.

CDC, through the Division of HIV/AIDS Prevention (DHAP), issued a new $120 million award over a 5-year period to 17 organizations in the new Capacity-Building Assistance (CBA) Program for high-impact HIV prevention. This program began April 1, 2019 and is tied in with high-impact prevention and is conscious of the new *Ending the HIV Epidemic: A Plan for America* initiative that will be funded in fiscal year (FY) 2020. This funding is intended to support a Capacity-Building Assistance Provider Network (CPN) to provide national training, regional TA, continuous quality improvement (CQI) and sustainability for community-based organizations (CBOs), and marketing and administrative support.

CDC issued a report using Behavioral Risk Factor Surveillance System (BRFSS) data that examined the proportion of adults who met CDC and US Preventive Services Task Force (USPSTF) recommendations for being tested at least once in their lives for HIV. Given that the majority of adults are not tested for HIV, 1 in 7 people with HIV do not know they have it. While early diagnosis and treatment keep people healthy and stop HIV spread, 60% of US adults have never had an HIV test and 70% with higher HIV risk have not been tested in the past year.

A study published by scientists in CDC's Division of Adolescent and School Health (DASH) found that school and family connectedness in adolescence helps to protect again health risk behaviors well into adulthood. Among students who felt less connected, 17% considered attempting suicide, 19% had been bullied at school, and 14% had misused prescription drugs.

Adults who experienced strong connections as youth were 48% to 66% less likely to have mental health issues, experience violence, engage in risky sexual behavior, or use substances.

CDC recently implemented a new webpage on high-risk substance use among youth, which includes information on risk and protective factors, resources, and information on the Teens Linked to Care (TLC) program. Through the addition of a new question to the Youth Risk Behavior Survey (YRBS) a couple of years ago that assessed misuse of prescription opioids, as well as other high risk substance use, they were able to identify that not only were a fair proportion of youth reporting substance use, but also those who did had other risky behaviors and outcomes as well. This site highlights the findings about high-risk substance use, including any use by adolescents with high-risk of adverse outcomes such as injury, school dropout, criminal justice involvement, and/or loss of life, as well as what CDC and local education agencies are trying to do to reduce risk.

In closing, Dr. Mermin congratulated DTBE's Andy Vernon, who recently received the International Union Against Tuberculosis and Lung Disease-North American Region Lifetime Achievement Award.

ACET DISCUSSION: NCHHSTP DIRECTOR'S REPORT

Regarding Dr. Cole's inquiry about youth behavior and the issues pertaining to vaping, Dr. Mermin indicated that CDC's Office of Smoking and Health (OSH) is focused on e-cigarettes. There is a lot of interest in examining not only the acute events reported in the media that CDC is investigating, but also in general with regard to the great increase in e-cigarette use among youth. CDC monitors this through the National Youth Tobacco Survey, which is conducted by DASH in collaboration with OSH using methodology similar to that of the YRBS. FDA also is concerned that some of the e-cigarette products are being targeted to youth, and that they have much higher concentrations of nicotine than tobacco that is addicting youth to nicotine. It also is known that a fair proportion of youth and adults who use e-cigarettes also are using tobacco. There is a lot of concern among the public, CDC, and FDA and there are ongoing activities.

Dr. Cole suggested that perhaps OSH should be invited to present to ACET.

DTBE Director's Update

Philip LoBue, MD, FACP, FCCP
Director, Division of Tuberculosis Elimination
National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Centers for Disease Control and Prevention

Dr. LoBue updated ACET on the FY2020 budget proposals, the APLISOL® shortage, the "Tuberculosis Elimination and Laboratory Cooperative Agreement," the National Institutes of Health (NIH)/CDC/Infectious Diseases Society of America (IDSA) HIV guidelines process, a recent NIH-CDC research meeting, Pretomanid, guidelines, and the ACET meeting format starting in 2020.

The FY2020 budgets are proposals at this point. The President's proposed budget is for level funding at approximately $135 million. For the last 5 years or so, the appropriation has been about $142 million with approximately $7 million going to the Center for Global Health (CGH) for international TB activities. The Administration formalized that arrangement in the proposed

budget. The House Committee on Appropriations proposed appropriation is a total of $152 million, with realignment of approximately $7 million to the CGH for international TB activities. That would be a net to DTBE of $145 million, which would represent an increase of $10 million. The Senate Committee on Appropriations has not released its proposal. There was a bipartisan agreement on domestic budget caps in terms of how much the government can spend in total for FY2020 and FY2021. However, the final legislation on an itemized budget has not been released indicating exactly how much will be spent on each item within that budget, including the specific DTBE appropriation. The fiscal year ends on September 30th, leaving just under 6 weeks to make these determinations.

In terms of the APLISOL® shortage, the FDA released a notice that a 3- to 10-month interruption of the APLISOL® supply would be expected by the end of June. Working with FDA and the manufacturer, CDC issued a Health Advisory on June 6th with guidance on three general approaches that was basically the same as when there was a TUBERSOL® shortage a few years ago: 1) use Interferon-Gamma Release Assay (IGRA) blood tests, though it is understood that feasibility is limited by cost and logistics if the laboratory is distant from blood collection; 2) substitute TUBERSOL® for APLISOL® to the extent possible, though it is known from the previous experience that once one of these is in shortage, it is unlikely that the other product can fulfill complete demand; and 3) prioritize allocation of tuberculin skin test (TSTs) with deferment of testing of lower risk persons. An *MMWR* article was published June 21st reiterating the Health Advisory information. At this point, there is no formal updated information on the projected end of this interruption.

The "Tuberculosis Elimination and Laboratory Cooperative Agreement, 2020-2024" is a 5-year re-competition of a cooperative agreement that provides funds to all states, territories, selected large counties and cities, and US-Affiliated Pacific Islands (USAPI). The announcement was published on July 5, 2019. This cooperative agreement includes program, laboratory, and human resource development components. This represents about 60% of DTBE's budget. ACET previously heard about the formula-based funding distribution and the specific formula developed for the new cooperative agreement from the Formula-Based Funding Working Group (WG), which includes disease burden, laboratory work volume, and performance elements.

During a previous meeting, ACET requested exploration of using the same process for developing DTBE guidelines as is used for the "Guidelines for the Prevention and Treatment of Opportunistic Infections in Adults and Adolescents with HIV" that is jointly sponsored by CDC, NIH, and the HIV Medicine Association (HIVMA) of the IDSA. This is done under the auspices of another federal advisory committee. This process involves the appointment of Co-Editors by their respective organizations. Subsequently, they appoint WG Leaders to address specific opportunistic infections. The Co-Editors and WG Leaders meet annually to determine the agenda for the coming year, and engage in quarterly calls to determine any changes needed in each section.

The attraction for DTBE and ACET is the idea of having living documents maintained on the web. The WGs are responsible for identifying relevant literature, conducting a "systematic" comprehensive literature review, and proposing updates to the guidelines based on that review. However, there is no methodology documented to confirm whether the literature reviews meet the current definition of "systematic." The cost ranges from $800,000 to $900,000 annually and includes administrative and organizational activities for the panel, WGs, and documents. This does not include the systematic reviews or writing of the guidelines. This approach is not feasible for DTBE guidelines; however, they will continue to seek other means by which to take

a living document approach. For example, the World Health Organization (WHO) does more frequent reviews and spends about $300,000 to $500,000. While this is somewhat less expensive, they do not use a living document process. In terms of DTBE doing this work in-house, staff members have other priorities so it tends to take longer. Another potential approach would be to complete more frequent updates on specific questions versus waiting 10 years to complete everything at once.

CDC met with colleagues in NIH's National Institute of Allergy and Infectious Diseases (NIAID) on July 12, 2019 to discuss and formulate domestic TB research priorities and consider ways to enhance collaboration. CDC provided presentations on its major research activities, including the Tuberculosis Trials Consortium (TBTC), applied research done in the Laboratory Branch, and the Tuberculosis Epidemiologic Studies Consortium (TBESC). Examples of areas identified for future discussion, coordination, and potential collaboration included: pre-clinical studies of new TB drugs and regimens, understanding pyrazinamide (PZA) susceptibility and resistance due to its critical part of the regimen for newer drugs, latent tuberculosis infection (LTBI) and the need for better tests that are predictive of people who will progress to TB disease, and the Relational Sequencing TB (ReSeqTB) database of isolate sequences and clinical information that would be useful for clinicians to understand mutations of concern for TB drug resistance.

Pretomanid is a nitroimidazole, which is a novel class of anti-TB agents that inhibit cell wall biosynthesis via blockage of the oxidation of hydroxymycolate to ketomycolate. It is both potent bactericidal and a sterilizing agent in mice. TB Alliance, which was overseeing this drug, submitted an application to FDA for the use of this drug as part of a new regimen that would combine bedaquiline and linezolid with pretomanid for the treatment of extensively drug-resistant tuberculosis (XDR-TB), intolerant multidrug-resistant tuberculosis (MDR-TB), and non-responsive MDR-TB. The advantage of this regimen is that it combines 3 drugs for 6 to 9 months all taken orally. TB Alliance submitted their data from the Nix-TB trial for review, which was a Phase 3 open label study of bedaquiline, pretomanid, and linezolid for 6-9 months with intent to cure XDR-TB and selected MDR-TB patients. The FDA advisory committee voted 14-4 in favor of approval in June 2019, and FDA made a final decision to approve pretomanid for this indication. CDC does not have information at this point about the anticipated cost of pretomanid.

To update the status of a variety of guidelines, the *Healthcare Personnel TB Screening and Testing Guidelines* were published in the *MMWR* on May 17, 2019; the *Drug-resistant TB Treatment Guidelines* are in CDC clearance and have been approved by the collaborating societies; the *LTBI Treatment Guidelines* have been cleared by CDC, approved by NTCA, and submitted for publication by the lead authors; the process has been started for the *Update on Use of IGRAs in Children* to reduce the age down to 2 years or less in selected children; the process will be started on *Guidelines for the Use of Pretomanid* now that it has been approved.

Regarding the format for future ACET meetings, there will be two in-person meetings and no webinars beginning with the April 2020 meeting. The format will be 1.5 days similar to previous December in-person meetings, with a Spring and Fall schedule.

ACET DISCUSSION: DTBE DIRECTOR'S UPDATE

Shortages

In response to Dr. Vernon's inquiry about the reason for the APLISOL® shortage, Dr. LoBue indicated that the reason is understood but the information is proprietary and they are not permitted to share it publicly.

Regarding Dr. Moore's inquiry about whether there are currently regional shortages of TUBERSOL®, Dr. LoBue said he found the shortages and the supply system incredibly confusing. The effect is quite variable, with some programs having no substantial problems. Many of those use a lot of IGRAs, so that is part of it. Many but not all of the programs that are more dependent upon TST seem to have a greater problem. When CDC recently tried to better understand the supply, they heard from some groups that they are having trouble getting TUBERSOL®. However, suppliers indicate that they have TUBERSOL® available. To some extent, the problem is that the system is highly complicated and there are numerous intermediaries. How much the intermediaries purchase, hold on to, and provide to direct end-users may create end-user shortages when there is not necessarily an actual shortage of the product. Another problem is that it is difficult to be released from a contract with one supplier to go to another one.

Colorado has experienced shortages of TUBERSOL®, with no luck contacting Sanofi directly and were told that more information would be provided in late August. Others noted that Sanofi has placed TUBERSOL® on allocation as a way of controlling a future shortage.

Guidelines

Dr. Vernon, Chief of the DTBE Clinical Research Branch, pointed out that the "Opportunistic Infection Guideline" is part of the HIV Guideline but is managed separately and differently in in a parallel and independent process. This leads to a TB set of recommendations, which oftentimes causes them to have to adjust or respond to possible differences in the recommendations that are made on a global basis as opposed to those made domestically. He wondered whether this had been factored into the thinking about the guideline process.

Dr. LoBue indicated that they have had representation working to reinstitute that, and these have to be cleared through division. If there are inconsistencies, those have to be changed. There is concern that there is no documentation of a systematic literature review, which does not fit with the formal guidance.

In terms of Ms. Bur's question about whether there has been any consideration of applying the same logic for screening of HCP to correctional workers with regard to recommending annual testing only if there is evidence of ongoing transmission, Dr. LoBue indicated that this question would have to be considered separately. There have certainly been more issues with transmission in correctional facilities than in healthcare facilities.

With respect to Dr. Higashi's question about the intersection between the HCP guidance and the 2005 *MMWR* that focused on facility risk and whether TB and facility risks could be addressed as an air transmissible disease problem to reduce confusion, Dr. LoBue pointed out that it would be difficult to say that all air transmissible diseases are the same. There are certain issues pertaining to determining when TB is no longer transmissible, which are very different from other airborne diseases.

Dr. Reves pointed out, and others agreed, that with the number of competing priorities, it seemed excessive to allocate nearly $1 million to outdated guidelines. For example, that would be crippling to the TBESC and the program. All of the major guidelines have been updated in the last 2 to 3 years, so he supported finding alternative methods to spending $500,000 to $900,000 a year to update guidelines more efficiently in the future.

Dr. LoBue emphasized that rather than waiting 10 years to address everything in a guideline, they likely would need to focus on updating one or two questions/components and then incorporating them into the unchanged guidelines for the remainder of the document. While they do not necessarily have to use the Grading of Recommendation Assessment, Development and Evaluation (GRADE) process per se, perhaps it could be along the lines of the Population, Intervention, Comparison, Outcomes (PICO) approach and utilizing a systemic methodology for the literature review. CDC and professional societies with whom they collaborate, such as ATS and IDSA, are not willing to entertain a living document process at this point.

NIH/CDC Research Meeting

Regarding inquiries about what level of leadership was in attendance at the NIH/CDC research meeting, whether there are plans to involve other agencies such as the US Agency for International Development (USAID), and whether the agenda/research priorities for DTBE and NIH include study of the use of emerging vaccines domestically in the context of investigation or other high risk settings, Dr. LoBue indicated that:

- Dr. Fauci was not present. However, Division Directors were in attendance from the Division of Microbiology and Infectious Diseases (DMID) and the Division of AIDS (DAIDS). CDC took several representatives, including himself and Dr. Mermin.
- It would be unlikely to involve USAID, given that the focus of this activity is domestic and USAID is strictly international.
- Vaccines were specifically discussed in terms of two areas: 1) *Pre-Exposure Vaccines*: This is not a likely focus of CDC's domestic program because the risk of exposure to TB in the US is generally low. While contact/contact investigations may be a potential area of interest, that would be fairly limited; and 2) *Post-Infection Vaccines*: These would be given following infection to prevent progression from LTBI to TB disease. There is interest in this, but the candidate vaccine that is furthest along ($M72/AS01_E$) has only about 50% efficacy with very wide confidence intervals and requires 2 doses a month apart. Assuming 50% efficacy and that a certain percentage of people will miss the second dose of vaccine, there is more confidence in some of the drug regimens that have about 90% efficacy even with 70% to 80% completion. There would be more interest in a vaccine with an efficacy of ≥80%, narrower confidence intervals, and that ideally requires a single dose.

Update on Youth Risk Behavior Survey (YRBS) TB Questions

Allison Maiuri, MPH CHES
Team Lead, Education, Training, and Behavioral Studies
Division of Tuberculosis Elimination
National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Centers for Disease Control and Prevention

Ms. Maiuri reminded everyone that during the August 21, 2018 ACET meeting, Dr. Underwood from DASH presented about the Youth Risk Behavior Survey (YRBS). A suggestion was made during that meeting to explore the feasibility and mechanics of adding TB-related questions to the YRBS. Her team explored this possibility, the findings from which she presented during this session. She began with a recap of the basics of the Youth Risk Behavior Surveillance System (YRBSS) and some of the surveys used.

The purpose of the YRBSS is to focus the nation on behaviors among youth causing the most important health problems, assess how risk behaviors change over time, and provide comparable data. The YRBSS monitors priority health-risk behaviors that contribute to the leading causes of morbidity and mortality among youth and adults including unintentional injuries and violence, sexual behaviors, alcohol and other drug use, tobacco use, unhealthy dietary behaviors, and inadequate physical activity. The YRBSS also monitors the two health outcomes of obesity and asthma.

The YRBSS consists of multiple surveys. The national survey is conducted by CDC and it provides data representative of 9th through 12th grade students in public and private schools in the US. The state, territorial, tribal government, and local surveys are conducted by departments of health and education and provide data representative of mostly public high school students in each jurisdiction. The state, territorial, tribal government, and local surveys include probability samples of schools and students. The surveys are anonymous, self-administered, and are completed in one 45-minute class period. The surveys are conducted biennially, usually during the spring. There are 4 US states that do not participate in the YRBS (Washington, Oregon, Wyoming, Minnesota). All of the other states participate, but they may not be able to share their data if they do not achieve a high enough response rate to provide weighted results. YRBS data are used at the national, state, and local levels in a variety of policy and program applications. Data can be used to describe risk behaviors, create awareness, set program goals, develop programs and policies, support health-related legislation, and seek funding.

Following DTBE's discussions with DASH, they found that the state survey would be the best target for proposing a new question. The most recent year for which these survey data are available is 2017. During that year, states and large urban school districts used a two-stage cluster sample design to produce representative samples of students in 9th through 12th grades in their jurisdiction. In 2017, the standard questionnaire contained 89 questions. States and large urban school districts can add and delete questions from the standard questionnaire. Of the states that conducted a YRBS, only two states and two large urban school districts reported using the standard questionnaire without modifications.

Regarding the process for pursuing the addition of a question to the YRBS state survey, CDC provides a list of core questions that must be used but allows some flexibility in the other questions that are included. This means that the surveys can vary slightly by location and that interested parties can propose new questions to be added to the survey. There is no formal process for proposing a new question to a state. Some states might have better options than others, depending on various factors such as previous response rates, informed consent rules in the state, and TB epidemiology in this case. To do this, it is necessary to contact YRBS Coordinators individually in each state. CDC and DASH have no say in whether a state accepts a question. Previous examples suggest that a compelling case must be made to a state regarding how the question would benefit them.

Ms. Maiuri shared the team's suggestion for possible TB questions. In developing some possible TB questions, the team reviewed the standard YRBS survey and sought guidance from DTBE leadership and their colleagues in DASH. They learned that a TB question needs to be behavioral and cannot be attitudinal- or knowledge-based. When developing these questions, they tried to keep in mind how the data would be used and whether the data would be generalizable and actionable. They also tried to gain an understanding, particularly from DASH, about how teenagers answer questions and whether there are issues of recall bias. For

example, they learned from DASH that testing questions tend to perform better than diagnoses questions. Sometimes teenagers have trouble understanding the concept of the diagnosis, but are more likely to remember receiving the test. These questions are based upon the four TB topics of testing, contacts to a case, diagnosis, and treatment. Consideration also was given to a vaccination question, which potentially could function as a proxy for non-US born individuals. With feedback from their DTBE colleagues, the team further narrowed down the list to these top 3 questions:

1. Testing: Have you ever been tested for Tuberculosis (TB) disease?
2. Contact: Has a family member ever been sick with Tuberculosis (TB) disease?
3. Diagnosis: Has a doctor or nurse ever told you that you have either Tuberculosis (TB) or Latent Tuberculosis Infection (LTBI)?

In thinking about how the data might be used, consideration was given to the variables to which a TB question might be compared. The standard demographic variables included in the survey are: age, grade, sex, Hispanic/Latino, race. There is not a required question that captures country of origin. While there are some questions that could serve as proxy options, they are not required questions. States are given a list of option questions designed by DASH that they consider adding to their survey, such as: years in US, other languages spoken in home, English fluency, homelessness, and HIV status. A potential option would be to ask states to add both a TB question and one of questions from DASH's optional list.

In closing, Ms. Maiuri posed the following questions for ACET's consideration and deliberation:

1. What would be the added value of a TB question?
2. What additional variables would be necessary to be able to capture meaningful patterns?
3. What states would be feasible and relevant candidates for a TB question?
4. If the group decides to move forward with a TB question, should ACET create a workgroup to organize these efforts?

ACET DISCUSSION: YRBS TB QUESTIONS

What would be the added value of a TB question?

- Part of ACET's discussion a year ago regarded the fact that this survey reaches a lot of people and could help inform decision-making pertaining to TB and youth.
- Adolescents represent a population that is often overlooked and often is lumped in with children overall. Adolescents are somewhat more mobile and less is known about TB risk in this group, so there would be value added in having more information about them to better understand their TB risk.
- A lot of thought will be needed to determine whether a TB question will be a useful addition, given that there tends to be blurring of TB and LTBI in this country. For example, Dr. Frieden and others once testified before Congress that they had LTBI, but it was summed up by others that they had TB. People may not have as much knowledge as is assumed, especially teenagers. A President's Emergency Plan For AIDS Relief (PEPFAR) question asking, "Have you ever had TB or LTBI?" had to be thrown out, because it was impossible to disentangle these.
- Making the question more specific could be valuable such as asking, "Have you ever tested positive for a TB test?"

- While it is possible that respondents would be fairly accurate about whether they had a skin test, they may not have knowledge about whether they had an IGRA test. Moreover, trends over time could become problematic as increasingly more IGRAs are utilized. If a decision is made to move forward with this, this issue would have to be dealt with methodologically.
- The potential questions should be vetted to determine whether the answers given are the answers they are seeking. It would be beneficial if background information and definitions could be included in the questionnaire to ensure that teenagers understand what is meant by a TB test, TB, LTBI, et cetera. Otherwise, it is unlikely that useful information will be obtained.
- Because this is a self-administered survey, it is likely that limited instructions are given and the question would have to stand on its own.
- Part of the problem is that TB is less concrete than substance use or sexual activity, which teenagers may be participating in directly such that they would know what their behaviors are and could articulate them.
- Given the difficulty in getting one question added, the likelihood of getting multiple ones added is slim.
- In terms of science, it is important to think about what information would be collected, how much, how it will be used, and how in DTBE's case it would be used for public health. They have not yet convinced themselves that they want to do this.
- There would be value added in establishing the magnitude of risk, and could inform decisions about who to target for testing and other interventions. Given the focus of the YRBS on emerging adults, this seems like an opportunity to learn more about risk.
- The National Health and Nutrition Examination Survey (NHANES) might be a more appropriate survey, given that it would allow for testing and sampling rather than just asking if someone has been tested previously.

What additional variables would be necessary to be able to capture meaningful patterns?

- As a surrogate for risk, collect information about residency outside the US. For example, this age group could be asked whether they were born in or have lived outside of the US for some time in a high burden country. Information about travel outside the country also could help to answer questions about trends over time, and adolescents are going to know if they traveled outside the country.
- A question that might be useful as a surrogate for ascertaining whether this is a group to be concerned about and/or to determine whether there are other immigrant health issues would be, "Do you have a non-US born parent?"
- It is important to remember that due to current immigration issues, adolescents may be reluctant to report out of country birth or travel.

What states would be feasible and relevant candidates for a TB question?

- South Texas poses a particular challenge. Being close to the Mexico border, children tend to travel back and forth and would not necessarily be tested. Younger children may be tested, but adolescents do not tend to present to the doctor unless there is a reason other than vaccination. There is likely to be a gap and a potential that teenagers may not understand how to answer the question.
- While it was not possible to get a TB-related question added to the New York City Department of Health and Mental Hygiene (NYC DOHMH) Community Health Survey (CHS), it was possible to add a travel-related question.
- More discussion is needed with regard to what group to target in low TB burden states.

- It also is important to remember that even if a question is developed, there is no guarantee that every state would agree to add it. This highlights the importance of being on very solid ground in terms of describing the added value to states, as well as to the global efforts of US TB programs.

If the group decides to move forward with a TB question, should ACET create a workgroup to organize these efforts?

- Perhaps a workgroup could help to further define the added value of including a TB question in the YRBS.
- The prevailing sentiment seemed to be that the case for acquiring accurate and meaningful information was not convincing.
- There was not a sense at this point that ACET was ready to form an additional workgroup or try to move forward. Therefore, it was suggested that consideration be given to adding this topic to the LTBI Workgroup's discussions. While it seemed somewhat nitty-gritty for the document on which this group is working, it could be discussed further in the workgroup as a topic. The LTBI Workgroup could put forth recommendations during the December 2019 ACET meeting and from that point, ACET can make a decision regarding whether they wish to pursue the addition of a question on the YRBS.

Increasing TB Funding in Texas

Imelda Garcia, MPH
Associate Commissioner, Laboratory and Infectious Disease Services Division
Texas Department of State Health Services

Ms. Garcia presented on the success the Texas Department of State Health Services (DSHS) has had in increasing their funding for TB in Texas in terms of tuberculosis in Texas, the Texas legislative process and DSHS's Exceptional Item (EI), telling one's story, building relationships with the Legislature, and making a compelling case for funding.

Texas is a large state with 254 counties across a wide geographic area. The DSHS Central Office Program Headquarters, State Public Health Laboratory, and pharmacy are located in Austin. There are eight Public Health Regions that serve and provide TB services in the areas that do not have a local health department, which are headed by Regional Medical Directors. DSHS funds 31 Local Health Departments (LHDs) across the state to implement TB services within their local jurisdictions. There are actually 63 LHDs in Texas, but only 31 of them have sufficient TB morbidity to warrant funding. The Texas Center for Infectious Disease (TCID) is headquartered in San Antonio. The TCID has 75 negative-pressure rooms, provides 24-hour nursing and respiratory care, and has three infectious disease (ID) physicians.

In terms of TB cases and rates over the past 10 years, Texas has been on a downward trend for many years. Even with the numbers decreasing, they still were able to make a successful case for increasing the funds coming to the TB program in Texas. Among the 254 counties, there are higher rates along the Texas/Mexico border, but the other areas of high rates are primarily rural. In the larger metropolitan areas, there are still fairly decent numbers of TB cases across the state. The fact that TB affects a broad range of elected leadership makes it easier to talk to the state Legislature than if only the areas of one or two Legislators were impacted. In state fiscal year (FY) 2018, the DSHS had 65 opportunities to engage with its elected and local leadership. Every time there is a TB exposure in a sensitive environment (school, daycare, hospital, place

of employment, homeless shelter, nursing home, college/university, retirement community, hospital, religious facility, et cetera), they summarize the initial exposure and number of contacts who have been identified. As they move through screening rounds, DSHS provides routine updates of the number of positives and the number of positives who have started treatment.

Most notable in Texas were two particular large-scale TB investigations. The first was in 2012 in a high school in Ellis County in North Texas. Almost 2300 contacts were identified, with 287 TB infections and 15 active TB cases identified. This was a very high-profile area. Elected leadership were invited to a Town Hall at the high school and there were a lot of concerned parents, so this outbreak generated a lot of media at the time. A few years later a new TB case was identified that were tied to the original investigation among individuals who never completed treatment and subsequently developed TB disease and exposed another set of people in different parts of the state. This highlighted the importance of making sure that those who are identified complete their treatment through public health.

The second large-scale investigation was in 2014 in a hospital in El Paso County, right on the Texas/Mexico border at the very Western tip of Texas. A healthcare worker who worked in a postpartum unit and newborn nursery had actually been sick for about a year, but the hospital had not followed its own in-house protocols to identify and prevent this individual from working and exposing patients. The individual self-presented to the LHD, which is when the investigation ensued. DSHS submitted an Epi-Aid request to CDC for assistance. Almost 1000 contacts were identified, the majority of whom were newborns (n=757). Because El Paso is a border town, this investigation crossed multiple states, countries, and territories and required a large effort in order to track down everyone across all of these jurisdictions to ensure that the families and babies received further follow-up. DSHS is very proud of the fact that there were only eight TB infections and no active TB cases as a result of this investigation. It also is important to note from the agency's perspective that they had just begun this TB investigation, and a few days later had the positive Ebola test from Mr. Duncan and had to shift into an Ebola response as well.

Texas does things differently in that the Texas Legislature meets only every other year and only for 140 days. Every odd numbered year from January to May, the Legislators spend time in Austin passing bills. The only bill they are required to pass is the appropriations bill. Because they meet only every other year, budgets are created for the next two fiscal years. That requires careful planning, given that there is no ability to make adjusted requests on a yearly basis. State agencies are permitted to ask for supplemental funding above their base Legislative Appropriation Request (LAR) via an exceptional item (EI). These are earmarks for very large, high profile expenses such as major construction/renovation, large-scale information technology (IT) projects, or pressing health and safety issues of public health concern. DSHS submitted a TB EI request in the 2017 and 2019 legislative sessions. While they got good traction in 2017, the funding landscape in Texas was not as good as it was in 2019. They made some adjustments to the request based on lessons learned in 2017, and were funded in 2019.

The DSHS EI request included several components, which were important in being able to garner the support of the elected leadership. The request components included the following, keeping in mind that these are biennial amounts:

- **LHD Capacity for TB Response of $10 Million**: Support a 70% increase in state funding to LHDs for increased TB detection and response

- **Frontline & Support TB Response Staffing of $4.9 Million**: Provide additional DSHS capacity for TB detection and follow-up activities in those areas of the state that do not have an LHD that provides TB services

- **Essential Tools for Responding to TB of $10.5 Million**: Maximize the effectiveness of existing and new TB investigation capacity through tools like laboratory testing support, TB nurse surge capacity, medications, video direct observed therapy, and phlebotomy training

- **TCID Renovations of $1.8 Million**: Make needed repairs to Texas Center for Infectious Disease facilities, including repair and ongoing maintenance of the negative air pressure system, which contains the spread of airborne TB within the facility

The total requested was $27.2 million with 28 FTEs, while the total ultimately received was $13.6 million and 12 FTEs. Including both federal and state general revenue, the percent change for the core TB program was a 24% increase and for the TCID was a 12% increase. Ultimately, they received additional dollars for TCID in order to backfill the shortfall that has been occurring in the hospital for quite some time.

In terms of the keys to getting funding. Ms. Garcia spent a lot of time with the DSHS's Government Affairs director discussing what she felt were the key components for the agency's success in garnering this funding. Within DSHS, the Government Affairs Team has the most face-to-face and consistent communication with the Legislative staff and the elected leadership. When sharing the story, it is important to actively engage and have the Press Officer and Government Affairs Team "on the same page" throughout the year on a daily basis. DSHS worked very closely with their Government Affairs Team and Press Office to produce well-crafted, thoroughly researched, easily understood messages to address a very specific need.

In terms of telling the story, it is important to highlight accomplishments along the way rather than waiting until asking for money. Partners should be kept informed of major activities (notable investigations, outbreaks, challenges). The impact of the work and its importance to the people served should be shown through the use of compelling stories and statistics, which makes it personal and puts a face to those affected when possible. DSHS tells its story through press releases, social media posts, emails or newsletters sent to a variety of groups (providers, medical bodies/associations, stakeholders, the public, the Legislature), public events, presentations, published research and articles, fact sheets, Grand Rounds/brown bags, committee/stakeholder meetings, and briefings for the Governor or Legislators. Some specific examples included issuance of some recommendations to public health partners across the state pertaining to the APLISOL® shortage, an agency tweet regarding World TB Day and highlighting TB in Texas, a TB fact sheet, and a success story of a TB patient that highlighted the importance of having specialized treatment in the TCID that is available to all individuals across the state and the importance of people getting back to work and resuming their lives.

In terms of building relationships with the Legislature, DSHS is in close communication with the Texas Legislature both in and out of session. Their Commissioner always reminds them that people do not do things for your reasons, they do them for theirs so it is important to determine what speaks to their cause and their communities. It also is important to remember that Legislators are not public health experts. While some of them may be involved in the healthcare field, a lot of them are real estate agents, attorneys, business owners, et cetera. Therefore, assumptions should not be made about what they do or do not know. Once their attention is captured, a compelling case must be made for the funding. It is essential for communication to be timely, accurate, responsive to Legislator's requests/needs, high-level, to the point, clear and consistent, free of jargon, and not overly academic. It is important to remember that all of this reflects on the agency as a whole. Examples of relationship-building with the Legislature include:

- Newsletters highlighting success stories, emerging public health threats, DSHS publications, reports, meetings and events sent to Legislators each month
- Notifications when bill implementation is progressing or projects are completed
- Opportunities to tour facilities and view progress in-person
- Notifications when outbreaks or events are happening in Legislators' districts
- Invitations to DSHS events and celebrations so that they can feel pride in their support of the agency and the program activities, and that offers them opportunities for positive press that they can take home to their constituents and communities
- Pre-session presentations and briefings with Legislative staff, which was one of the key efforts the agency made approximately a year and half before the session to show the value of the dollars spent and that they are not just a line item
- Annual reports

In terms of some of the compelling facts and figures that have conveyed the story, most Legislators do not know how much TB there is in Texas. Many think this is a rare disease that does not affect them very much. However, when the agency reported to the Legislators that over 14,500 individuals were exposed to active TB in Texas in 2015 who needed to be screened, this highlighted the "shock and awe" of the impact TB has on Texas even though they may not know it or hear about it. The Legislators were also keen on the fact that due to the funding levels at the time, public health was able to screen only 62% of those who were exposed due to staffing limitations and time needed to track and engage individuals into screening and treatment.

To recap the major factors leading to DSHS's success, the financial climate was right in that the Texas Legislature had more general revenue available to appropriate in the FY20-FY21 biennium. In addition, DSHS prepared its EI well in advance and did not give up. They submitted the EI in 2017 and when it did not get funded, they submitted it again in 2019. In addition, the EI was scalable. The first ask was for everything they wanted, but they also had scalable options ready based on how much money was available and what the legislature was willing to fund.

In terms of DSHS's next steps, the success of acquiring additional funding does not stop with the receipt of the money. It should forward into showing the Legislature that they have done what they said they would do. Over the summer, they have been working on their implementation plans, FTE recruitment, and identifying the timelines and deliverables. They have been sharing that with the Texas Legislature to inform them of progress and barriers as

they occur. Moving forward, they will continue sharing TB-related information externally of examples of the TB EI in action to illustrate how it contributes to enhanced response efforts, demonstrate that they are good stewards of public funds, and show how the funds received lead to meaningful results.

ACET DISCUSSION: INCREASING TB FUNDING IN TEXAS

In response to a question regarding whether DSHS has different funding streams for different purposes and how the agency uses federal versus state, Ms. Garcia indicated that they spend federal funds in alignment with the federal guidance they receive. There are some limitations on what they are permitted to do with federal dollars, and this is where they supplement with their TB monies. With the guidance of their TB Expert Panel, they wanted to shift to use IGRA testing as a gold standard. That required a significant increase in state general revenue to support IGRA testing statewide as the preferred mechanisms for testing. They have different categories for which they use different methods of finance to ensure that they make the most out of every penny they have.

Regarding an inquiry about how DSHS achieved such a nice balance in keeping their partners informed amongst all of the other competing priorities, Ms. Garcia emphasized that TB EI was not the only EI they had. They also had significant EIs for their laboratory and their National Electronic Disease Surveillance System (NEDSS). Because of the sheer volume of the large-scale investigations, TB remained prominent. They are engaging with their elected leadership on TB for a number of reasons, such as some of the border issues. This is a challenge because they serve everyone with TB. Ultimately, it does not matter how someone got it. What matters is the exposure. They also have a very supportive Commissioner who wholeheartedly embraces and supports the TB work.

In terms of a question about the laboratory tour mentioned, Ms. Garcia indicated that they have conducted many laboratory tours. They have invited the Governor, state Senators and Representatives and their staffs, Legislative Budget Board analysts, and anyone else who touches TB. It is often easier to get more face-to-face time with staffers. If the staffers feel confident in and connected to the agency/program, they deliver positive messages to Senators and Representatives.

TB Prevention, Treatment, and Care of Minors in HHS Custody

Douglas H. Esposito, MD, MPH
Medical Officer/Epidemiologist
Division of Health for Unaccompanied Children
Office of Refugee Resettlement
Administration for Children and Families
US Department of Health and Human Services

To orient everyone to the organizational structure, Dr. Esposito indicated that the Administration for Children and Families (ACF) is one of the 11 agencies that make up HHS. The Office of Refugee Resettlement (ORR) sits within ACF, while the Division of Health for Unaccompanied Children (DHUC) sits within ORR.

Unaccompanied children (UC) are defined by US law as children who are less than 18 years of age without lawful immigration status in the US and who either have no parent or legal guardian in the US or no parent or legal guardian in the US available for immediate care or physical custody. The vast majority of UC migrated from Guatemala, Honduras, and El Salvador. They usually enter the US via the US/Mexico border. After crossing the border into the US, these children are taken into custody by US Customs and Border Protection (CBP). By law, custody of UC is then transferred to ORR. This transfer of custody is unique to UC. Other populations, such as adults and families, remain in the custody of the Department of Homeland Security (DHS).

In terms of the number of UC referred to ORR by fiscal year from 2011 through 2019, the number peaked in 2016 at over 59,000. Last fiscal year, there were over 49,000 children referred. Through May of the current fiscal year, already nearly 50,000 children had been referred—more than in the entire previous year. In terms of the age and gender of UC referred to ORR over the last three fiscal years, over 80% have been 13 years of age or older and more than two-thirds have been male.

ORR's greater than 100 shelter programs throughout the country vary widely in type and bed capacity from in-home foster care that houses just a few minors, to moderate size standard, secure, and staff secure shelters, to large temporary influx shelters that house more than 2000 children. UC are placed in different shelter types based on multiple factors including, but not limited to, their age, gender, and whether they are pregnant or are parents themselves and have their children with them. ORR-funded UC programs are located in 20 states.

The ORR shelter programs and their staffs are responsible for the care and custody of the UC. This includes providing shelter, food, clothing, education, medical screening, and ongoing health care. Shelter programs work to reunify UC with qualified sponsors, commonly an immediate family member, who will care for them while their immigration cases proceed. These sponsors may reside anywhere in the US. Permanent shelter programs must meet both state-specific licensing requirements and national care standards.

ORR funds shelter programs to provide access to licensed medical providers who either work at the shelters or in the community. Services are coordinated by an underwriter. Health services include the initial medical exam (IME), acute/emergency care, follow-up care, routine dental care, and mental health services. By late July 2019, there were approximately 10,000 UC in HHS custody. Occupational capacity was about 56%, which was down from about 95% 2 months earlier. The system-wide length of stay averaged around 45 days, down from a recent high of 93 days in November 2018. ORR continues to work to further reduce length of stay in ways that do not jeopardize the safety or welfare of the children. They also are always searching for additional bed capacity.

The IME is the core of the health screening activities and is central to ORR's TB control efforts. After being admitted to an ORR-funded shelter, all UC receive an IME. ORR requires the IME to be performed within two business days of admission. The IME is a complete history and physical exam, including medical and sexual histories, a complete review of systems, an age-specific behavioral assessment, vision screening, and immunizations according to the Advisory Committee of Immunization Practices (ACIP) catch-up schedule. The IME also includes age- and risk factor-based screening conditions of clinical and public health concern including, but not limited to, gonorrhea, chlamydia, syphilis, HAV, HIV, TB infection, pregnancy, and lead. All of ORR's screening guidelines were developed and adapted from a variety of sources, including

CDC Technical Instructions for Panel Physicians, *CDC Domestic Refugee Health Guidelines*, and *Standard United States Health Screening Guidelines*. An abuse and human traffic screening also is completed that includes post-traumatic stress disorder (PTSD) and other mental health assessments, physical and sexual abuse screening, and questions about trafficking. US who screen positive may receive a comprehensive psychological assessment, referral and treatment while in care, a home study, and post-release services.

ORR operates a secure web-based data system called the UC Portal that was established in 2014. Expanded health functions of the portal were initiated in March 2016, which captures data on healthcare provider visits, symptoms, diagnoses, medications, TB screenings/evaluations/ treatments, immunizations, reportable disease laboratory results, and contact investigations. TB screenings, evaluations, and treatments are an important part of the UC Portal functionality. Shelter staff enter IME data and upload documentation into the UC Portal. ORR headquarters receives automatically generated email notifications for certain entries so that necessary actions may be taken. Notifications are received for such things as entry of reportable infectious disease diagnoses whether suspect or final, abnormal TB screening chest X-rays (CXR), and TB-related bacteriologic testing. Facilities are responsible for notifiable disease reporting consistent with their state and local laws and regulations. Each facility is required to inform ORR DHUC about each suspected or confirmed case and follow ORR medical guidance on managing cases and contacts.

ORR's TB control strategy depends upon collaborative partnerships between shelter programs, ORR, and local and public health entities in the communities where each shelter is located. The IME is central to ORR TB control. As noted earlier, the IME is completed within 2 business days of admission and includes medical history, TB exposure history, review of systems, physical exam, and risk/age-based TB testing. Shelter programs are required to notify ORR DHUC if any active TB disease concerns are identified. In terms of ORR's risk/age-based TB testing strategy, for children under 2 years of age, a TST is placed. If the TST is positive, a single-view TB screening CXR is done. Children 2 to 14 years of age are similarly handled, with the notable different being that an IGRA is done instead of a TST. For UC ≥15 years of age, both an IGRA and a CXR are done. The CXR is obtained independent from the IGRA result for the UC in this age group.

Shelter programs are required to upload into the UC Portal all radiology reports for all TB-related CXRs. Hard or digital copies of films are not routinely received. If an abnormality of any kind is reported by the radiologist, the entry must be marked "abnormal." Entry of an "abnormal" TB-related CXR results in an automatically generated email notification that is sent to ORR DHUC. ORR DHUC Medical Officers review all "abnormal" TB-related CXR reports within 24 to 48 hours, or sooner if requested by the shelter staff. "Abnormal" TB-related CXRs are classified by an ORR DHUC Medical Officer into one of four categories: Normal/findings of no concern, Abnormalities of concern for conditions besides active TB, Abnormalities suggestive of active TB, or More information needed. CXR classifications results in another automatically generated email notification to the shelter. ORR DHUC Medical Officers then additionally deliver to the shelter customized medical guidance on the back of the auto-generated notification.

Medical guidance may include isolation, gathering additional history, or obtaining a 2-view CXR. UC deemed in need of further evaluation based on an abnormal CXR and accompanying data may be asked to be referred to shelter medical providers and/or community resources based on local community standards and practices. This includes evaluations for possible active TB disease or other non-TB-related conditions such as complex congenital cardiac disease, non-TB

pulmonary disease, or musculoskeletal disorders. TB evaluations may be conducted at county or city health departments, local community hospitals, tertiary care referral hospitals, or specialty offices such as pediatric pulmonology or infectious disease. ORR DHUC works with each shelter and local resources to determine the best way forward on a case-by-case basis. Dr. Esposito shared an example to illustrate how this all works and to highlight the importance of the collaborative partnership between the shelter programs, ORR, and local health and public health entities.

In 2018, DHUC completed an analysis of FY2017 data to assess its active TB case-finding system. This analysis included over 27,000 individual records. Of those, almost 1300 (4.7%) had a CXR that was designated as "abnormal." These "abnormal" CXRs were classified by ORR DHUC medical staff as follows: 977 (71.5%) were concerning for conditions other than active TB, 165 (12.8%) were found to be of no concern, 144 (11.1%) required further information to make a TB determination, and 60 (4.6%) were suggestive of active TB disease and were investigated further. All active TB diagnoses are made by ORR's community partners, which as mentioned earlier typically include county or city health departments, hospitals, or pediatric specialists. These same partners also direct treatment. Shelter staff help coordinate care and are responsible for tracking and collecting relevant records, including final MTB culture results and treatment details. ORR DHUC monitors all activities and assists shelter staff and partners in whatever ways are necessary.

Data for active TB cases for calendar years 2017 and 2018 were included as part of a poster presentation at the 2019 National TB Conference in Atlanta last April. Both lab-confirmed and clinically diagnosed TB cases were included for both calendar years. There were 7 lab-confirmed TB cases in 2017. There were 22 lab-confirmed cases in 2018, of which 14 (66%) were lab-confirmed and 8 (35%) were clinically diagnosed. So far in FY2019, ORR has referred 66 UC for active TB evaluations. Of these, 21 were diagnosed with active TB. The demographic characteristics of these 21 UCs are similar to previous years with 14 (67%) males, a median age range of 16.6 years, and 10 who had or currently have a contact investigation. When contact investigation is indicated the same shelter program, ORR, and local partnerships come into play. Conference calls are typically convened at the outset of a contact investigation to help establish roles and responsibilities and keep things moving as smoothly as possible. The concept of shared responsibility for most tasks also helps keep things moving. ORR assists the shelter programs and the health departments in all aspects of a contact investigation.

LTBI is not routinely treated while in ORR custody. This is largely due to the transience of the UC population and the relatively short stays in ORR custody, which are sometimes just a few days. This makes it difficult to assure that LTBI treatment will continue once discharged. ORR recommends that LTBI be reported where required. If a minor is expected to remain in custody for less than 3 months, ORR recommends that LTBI treatment be deferred until after reunification. For those who are expected to stay 3 months or longer or are at high-risk for developing active disease, ORR recommends that LTBI treatment be initiated while in ORR custody. ORR always recommends that LTBI treatment be done in consultation with local health departments. If treating, ORR recommends short course treatment unless contraindications or intolerances exist. For UC not treated while in ORR custody, several steps are taken to try to ensure that LTBI treatment is ultimately initiated. ORR notified in writing all sponsors receiving a child with an LTBI diagnosis about the importance of treatment. Sponsors are instructed to contact their local medical provider or health department as soon after their child arrives home as possible to seek treatment. Sponsors receive a notification letter in English and Spanish and the pertinent reports and are asked to take all of these documents with them to their

appointment. ORR also asks that the sponsors review the updated LTBI treatment guidance on the CDC website, which is provided to them.

ORR also reports cases of LTBI among UC reunified to a state via CDC's Epi-X system. This program called the Unaccompanied Children LTBI Reporting Program began reporting data on UC discharged during calendar year 2018. Thus far, approximately half of the states have signed on to receive these data. The program will move forward with two annual data transmissions, each covering a 6-month period. ORR is hopeful that this will help achieve more complete LTBI treatment among UC.

ACET DISCUSSION: TB PREVENTION, TREATMENT, AND CARE OF MINORS IN HHS CUSTODY

Regarding an inquiry about how many UC do not receive a full workup because they are not in custody more than 48 hours, Dr. Esposito said that children tend to stay a little longer than that. While occasionally UC are there only 3 to 5 days, the majority are in custody for longer depending upon their sponsor's situation. Though IMEs are to be completed within 2 business days, sometimes the results are not back. ORR will clear children ≥15 years of age who have a CXR but no symptoms, no concerning exposures, and their CXR is normal. When their IGRA results come back, ORR will communicate a positive diagnosis of LTBI to their sponsor. For younger children, ORR waits until the IGRA or the TST results are back before they are cleared for discharge. Occasionally, UC will age out. ORR may keep children in custody until their 18th birthday. On their 18th birthday, Immigration and Customs Enforcement (ICE) will gain custody and pick them up. ORR tries to communicate results to ICE and fill them in on all of the details. Unless something goes wrong, almost no UC get through the ORR system without being cleared of active TB.

In response to a question about whether UC for whom the local level receives notification should be handled any differently than B1 or B2 notifications, Dr. Esposito did not think that ORR UC needed to be handled differently. One problem ORR encounters is that they present to counties with IGRA and a CXR report, but almost never with the CXR itself. ORR suspects that frequently children with an LTBI diagnosis will be re-screened by health departments, which is probably appropriate without an actual CXR since details in reports from radiologists can be variable.

With respect to a question about whether the shelters have negative-pressure isolation rooms, Dr. Esposito said that one of ORR's many challenges is that most programs do not have true medical isolation capabilities. Therefore, they do their best to isolate children distant from everyone else, in a room by themselves, with a door that closes. A few shelters do not have this capability, so ORR will transfer those children to another program that can do this more effectively. Some counties that are uncomfortable with this will admit children for true isolation.

Concern was expressed that it is not clear in some jurisdictions whether Public Charge applies if children are 18 years of age and have been released, which can be a barrier to receipt of services. ACET will seek an answer to this question and will follow-up.

Regarding a question about how decisions are made in terms of vaccinating children who do not have their Yellow Card, Dr. Esposito reported that most come without their Yellow Card. Without any documentation, by and large most of these children receive the full cadre of vaccinations as though they are not immunized. That process went under scrutiny in the beginning. It is known that immunization rates in Central America are not that bad, so they are over-immunizing. However, there is no choice in terms of trying to mitigate some of the infectious disease rates

they face. They work very hard to try to control/eliminate cases of mumps, chicken pox, and influenza. The policy is that all immunizations are given at the IME and follow-up immunizations are given for those who stay in ORR's care. Overall, the programs do an excellent job in delivering immunizations. These children are in congregate settings, which means that there is always high risk for transmission of infectious diseases. Especially in the recent backlog at the border where children were being housed together for several days, infectious diseases (primarily varicella, mumps, and group A strep pharyngitis) ripped through the population pretty quickly. Thus, ORR tries their best to get children isolated and immunized to try to mitigate transmission.

In response to a question about whether all services provided in the child's language or primarily in Spanish, Dr. Esposito indicated that most UC speak Spanish. There are more native Guatemalan languages than probably are identified, and they also receive children from Romania, China, Vietnam, India, et cetera. Those children tend to go to programs that have the capacity to interact with those children in their native languages.

The importance of working with ICE to ensure that TB programs understand the differences between the populations being screened was emphasized.

Update by the Essential Components Workgroup

Barbara Cole, RN, MSN, PHN, ACET Chair
TB Controller
Riverside County (California) Department of Public Health

Ms. Cole reported that Dr. Redfield sent a letter acknowledging receipt of the *Essential Components of a Public Health Tuberculosis Prevention, Control, and Elimination Program: Recommendations of the Advisory Council for the Elimination of Tuberculosis (ACET) and the National Tuberculosis Controllers Association (NTCA)* document. This document was submitted to CDC with ACET's request to submit the document to the *MMWR* for possible publication under "Recommendations and Reports." Secretary Azar asked Dr. Redfield to reply on his behalf. The reply letter indicates that a program representative will contact Ms. Cole soon with a more detailed response. At this point, the Essential Components Workgroup has completed its work, submitted the document, and is hopeful that it will move forward in terms of being published. Once the document is cleared by CDC, ACET can then discuss additional methods for dissemination.

Update by the TB Drug Supply Workgroup

Jennifer Flood, MD, MPH
Chief, Tuberculosis Control Branch
California Department of Health Services
ACET Member & Workgroup Chair

Dr. Flood reported that the TB Drug Supply Workgroup has had a number of events since the last meeting. FDA approved the new drug, pretomanid. FDA reported that a 3- to 10-month interruption of the APLISOL® supply was anticipated by the end of June 2019, for which CDC issued a Health Advisory with guidance on three general approaches: 1) use Interferon-Gamma

Release Assay (IGRA) blood tests; 2) substitute TUBERSOL® to as possible; and 3) prioritize TST, with deferment of testing of lower risk persons. The TB Drug Supply Workgroup has engaged in a number of meetings to review ongoing challenges primarily centered on single manufacturers, cost escalations, and difficulties with the continuing clofazimine (Cfz) non-tuberculous mycobacterium (NTM) process under Novartis. To address the complexity of the current system and the fact that it is centralized and distribution is not always transparent, the TB Drug Supply Workgroup is working with NTCA to use data that they will retrieve via survey to be launched shortly that will describe challenges in accessing drugs by TB programs across the country. This is an update of a survey conducted several years ago, which should provide data to springboard recommendations from the TB Drug Supply Workgroup. These recommendations will be presented in the TB Drug Supply Workgroup's formal final report in December 2019.

Update by the LTBI Workgroup

Jennifer Flood, MD, MPH
Chief, Tuberculosis Control Branch
California Department of Health Services
ACET Member & Workgroup Co-Chair

Dr. Flood reported that Dr. Jeffrey Starke, Chair of the LTBI Workgroup, has rotated off ACET. He will continue to work with the LTBI Workgroup as a Subject Matter Expert (SME). The LTBI has made a lot of progress. The first draft of the LTBI Workgroup report, *A roadmap to TB elimination: focus on LTBI*, is expected to be revised over the next two months. This report is formatted for publication in the *MMWR* in the event that this is a feasible vehicle. The primary purpose of the report is to provide an update to ACET's 1989 publication, *A Strategic plan for the elimination of tuberculosis in the United States,* but fully focusing on LTBI. The rationale behind the new report is that the epidemiology has changed, with LTBI generating most of the cases. The report structure revolves around the impediments to scaling up LTBI testing and treatment in the United States and why adoption has not been more successful, particularly in the context of the USPSTF recommendations and new testing and treatment. The LTBI Workgroup spend a lot of time discussing the current barriers, as well as reviewing the literature and expert experience on overcoming those barriers. The LTBI Workgroup wanted the four main strategies called out as the centerfold of this report to ACET as a whole, which are to: 1) find and engage high-risk populations and their providers; 2) use focused, effective testing and treatment strategies; 3) develop LTBI surveillance; and 4) secure new resources for LTBI activities. There are numerous activities under each of these strategies. The anticipated impact of the new recommendations is expected to be successful expansion of LTBI testing and treatment and TB disease prevention in the US. A lot of activities throughout the country are focused on these strategies already, but this document will provide a sharply-focused strategic document from ACET. The report makes clear that while it might be possible to achieve pre-elimination, elimination will not occur without more novel interventions and research and global expansion of TB control and prevention in parallel with what is occurring domestically. The draft report will be circulated to ACET in a more advanced form with the materials disseminated prior to the December 2019 meeting. ACET can then engage in an in-depth discussion and act on the report during the meeting.

ACET Business Session

Barbara Cole, RN, MSN, PHN, ACET Chair
TB Controller
Riverside County (California) Department of Public Health

Ms. Cole opened the Business Session and facilitated a review of old and current business items that warranted ACET's formal action, and allowed time for additional discussion and/or requests for future agenda items.

Business Item 1: Approval of Previous ACET Meeting Minutes

A motion was properly placed on the floor by Dr. Lisa Armitige and seconded by Dr. David Horne to accept the April 16, 2019 ACET minutes. With no further discussion or changes, the motion to accept the minutes as written carried unanimously with no abstentions or opposition.

Business Item 2: Response to ACET's Letter to the HHS Secretary: Drug Supply

The ACET letter sent to the HHS Secretary pertaining to the drug supply was received, but a response has not yet been provided to ACET.

Business Item 3: Response to ACET's Letter to the HHS Secretary: Public Charge Rule

The letter sent to the HHS Secretary to express ACET's concern regarding the potential negative impact of the Executive Order pertaining to Public Charge has not yet received a response. At this point, it appears that this order could go into effect in October 2019. However, there have been no official communications on that yet.

Business Item 4: ACET's Semi-Annual Report to the HHS Secretary

During the April 2019 meeting, ACET began working on the semi-annual report to the HHS Secretary. Ms. Cole incorporated the edits suggested during the last meeting, which ACET reviewed during this meeting. The goal is to finalize the report in December 2019 to allow for incorporation of any additional information and/or edits. The following suggestions were made during the August 20, 2019 meeting:

Background

- No comments or corrections.

Six Concerns That Continue to be Paramount in ACET's Deliberations

- Regarding the input on changing the order of the six concerns, *Strengthening the Public Health Infrastructure* was placed first as requested.
- A request was made to place *Targeted Testing of Individuals at Risk for Progression from LTBI to active TB* second. However, Ms. Cole felt that the intermittent shortage of drugs is

critical in that there can be no treatment without drugs. Therefore, she left that as the second concern.

- A suggestion was made to remove "Particularly Second-Line Drugs" from the second concern heading, given that it is not always clear to readers what constitutes second-line drugs.
- Under the second concern, a suggestion was made to revise the line stating "That this strategy be sustained until more long-term solutions are identified is essential" to "It is important that this strategy be sustained…"
- For the fourth concern pertaining to congregate settings, a suggestion was made to remove the statement reading, "Additionally, strategies to improve case detection, medical management, and treatment of TB disease and LTBI must be developed and implemented. TB surveillance data must be collected, analyzed, and distributed so that TB trends can be monitored accurately" and subsume it into the first concern regarding infrastructure minus the word "Additionally." It was agreed that a more general statement could be included under strengthening the public health infrastructure. There is verbiage regarding the specific role of public health. They must balance providing enough information so that the HHS Secretary understands ACET's concerns with not including too much information. ACET agreed with the solution to leave the statement under the fourth concern, but include something similar under the first concern to avoid mixing the two.
- Regarding the fifth concern pertaining to research, the semi-annual report addresses the HHS Secretary. The second paragraph beginning with, "Programs should take every opportunity" shifts the target audience to researchers and programs. Given that the target audience is HHS, the goal here should be to articulate that the current investment is insufficient and a robust investment in clinical and basic research is essential. The remainder of verbiage under the fifth concern should be deleted. An important area of research that could benefit programs is resourcing for operational implementation research along the lines that the TBESC has conducted to understand how to translate the effort for elimination to effective implementation in a community beyond public health.
- A suggestion was made to add the concern regarding the potential impact of the Public Charge Executive Order. While this concern is spelled out in the individual letter submitted to HHS, inclusion in the semi-annual report offers another opportunity to identify this as one of ACET's emerging concerns. Rather than adding a seventh concern, perhaps this could be placed in "the ask" under *Assistance from the HHS Secretary*.

Progress Toward TB Elimination

- This section offers the opportunity to emphasize the need for domestic TB resourcing. Every time global TB is included, people think that the problem has been taken care of by resourcing global TB. It was suggested that this section emphasize that this is domestic, because if they cannot address LTBI in the US, there can be no elimination.
- A suggestion was made to revise the sentence reading, "Eliminating TB in the United States will require continued vigilance and collaboration between public health and the private sector" to "Eliminating TB in the United States will require continued vigorous collaboration and investment in the public health and private sectors, including quality assurance and metrics."

Assistance from the HHS Secretary

- Sentiment was expressed that global elimination must be mentioned, because if it is not controlled globally there will continue to be imported cases in the US.
- A suggestion was made to align the paragraphs with the bullets so that for each heading, there is at least one bullet and the order is the same as in the introduction paragraph.
- Underline or bold the actual "ask" in each bullet. For example, underline "designating LTBI treatment as a covered service in Medicare and Medicaid" under the first bullet so that it stands out.
- Developing a metric for evaluating performance should span beyond Medicare and Medicare, given that millions of individuals present to community centers. Perhaps something to the effect of, "A health center quality improvement metric focused on TB prevention" could be added. For example, the Federally Qualified Health Centers (FQHC) recently received millions of HHS dollars with HIV called out specifically as a public health threat to be address by quality assurance activities for this new money. TB is often not recognized.
- There was a suggestion to remove the bullet stating, "remove barriers to no-cost sharing for treating persons with LTBI and ensure it is a covered Medicaid service" as it is not clear that HHS can do anything about this. However, the decision was made to leave it since healthcare is currently so dynamic. Revise the statement to include "remove cost sharing, including co-payments."
- Calling out only NIH in the bullet beginning "facilitate research to shorten TB disease" does not call out the importance of the work CDC/DTBE specifically does with clinical trials and TB. Given that this has long been under-funded, perhaps "and the TBTC, and operational research" could be added here.
- The bullet regarding congregate settings seems somewhat vague. Better define "strengthen support" and address the challenges with the APLISOL® shortage and the resources required to switch to IGRA-based testing in congregational settings. Perhaps language also should be added to request that HHS support access to all TB treatments by ensuring that they are included in the Medicaid formulary, including newer drugs such as pretomanid.
- Add a bullet to align with Concern #2 to address intermittent shortages of anti-TB drugs, as well as long-term strategies to support the current national stockpile. Perhaps also point to a specific advisory body within HHS that could help carry out some of these objectives. For example, ask the HHS Secretary to direct or work with the Agency Drug Shortages Task Force within the FDA to specifically explore long-term solutions for TB drugs.
- Consider adding a bullet to address the Public Charge issue.

Business Item 5: Advice Requested from ACET

Ms. Cole presented a table with two pending pieces of advice requested from ACET workgroups and reviewed their status:

Advice Requested from ACET

Topic	Action
Critical next steps to ensure a continuous, affordable anti-TB drug supply	Relevant discussions are outlined in the previous minutes. Key components of the recommendations were discussed during this meeting and will be included in the report to the HHS Secretary.
ACET's reaction to the approach and preliminary findings of the LTBI Workgroup	The report was presented during this meeting. The workgroup will provide the full report and recommendations to the full ACET during the December 2019 meeting, with the goal of approving those recommendations to move forward.

Business Item 6: Future Agenda Items

Ms. Cole noted that an Agenda Setting Workgroup will be formed. There will be a two-day meeting in December 2019 for which the following topics were suggested:

Presenter	Agenda Item
TBD	Presentation on vaping and the impact on people's lungs, particularly with regard to youth and vaping
TBD	Update on the Public Charge and the status of the Executive Order
TBD	Further information regarding Dr. LoBue's meeting with NIH pertaining to: 1) better coordination with regard to pre-clinical trials of TB drugs, 2) the issue of pyrazinamide (PZA) resistance, and 3) having some predictors by which people with LTBI might progress to active TB if not treated
Business Meeting Discussion	Revisit NTCA's request regarding revision of the Bacillus Calmette–Guérin (BCG) vaccine guidelines that are over 20 years old. Potential resources: • Dr. Barbara Seaworth, who was a lead author on a peer-reviewed journal article several years ago, which made some recommendations about the use of BCG vaccine and travel • The Advisory Committee on Immunization Practice (ACIP), which said they did not believe there was a need to write a new document pertaining to BCG vaccine and with whom there was an email exchange
Discuss with Agenda Setting Committee	Update on the TB Centers of Excellence, given that they were recently re-authorized and may have a different focus

Presenter	Agenda Item
Bruce Struminger University of New Mexico Diana Fortune New Mexico Department of Health	Presentation on the use of telehealth and supporting TB activities
Dr. Jennifer Flood Drs. Jennifer Flood/Jeffrey Starke	Update by the ACET TB Drug Supply Workgroup Update by the ACET LTBI Workgroup: Detailed report with recommendations and a vote

Public Comment Session

No public comments were provided during this meeting.

Closing Session

The next ACET meeting will be convened on December 10-11, 2019 in-person in Atlanta, Georgia.

With no further discussion or business brought before ACET, Ms. Cole adjourned the meeting at 3:20 pm on August 20, 2019.

CHAIR'S CERTIFICATION
I hereby certify that to the best of my knowledge, the foregoing minutes of the proceedings are accurate and complete.

Date

Barbara Cole, RN, MSN, PHN
Chair, Advisory Council for the
Elimination of Tuberculosis

Attachment 1: Participants' Directory

ACET Members Present

Ms. Barbara Cole, Chair
Dr. Lisa Armitige
Dr. Robert Belknap
Dr. Jennifer Flood
Dr. David Horne
Dr. Robert Horsburgh, Jr.
Dr. Lixia Liu
Ms. Kristine Stewart-East
Dr. Zelalem Temesgen

ACET *Ex-Officio* Members Present

Dr. Naomi Aronson
US Department of Defense

Dr. Amy Bloom
US Agency for International Development

Dr. Ulana Bodnar
US Department of Justice

Ms. Sarah Bur
Federal Bureau of Prisons

Dr. Karen Elkins
US Food and Drug Administration

Dr. Diana Elson
US Department of Homeland Security
US Immigration and Customs Enforcement

Dr. Letha Healey
Health Resources and Services Administration, HIV/AIDS Bureau

Dr. Jonathan Iralu
Indian Health Service

Dr. Steve Weissman for Mr. Stephen Martin
National Institute for Occupational Safety and Health

ACET *Ex-Officio* Members Absent

Dr. Mamodikoe Makhene
National Institute of Allergy and Infectious Diseases, National Institutes of Health

Dr. Thomas Nerad
US Department of Labor/Occupational Safety and Health Administration

Dr. Gary Roselle
US Department of Veteran Affairs

ACET Liaison Representatives Present

Dr. Shama Ahuja
Council of State and Territorial Epidemiologists

Dr. Robert Benjamin
Stop TB USA

Dr. Julie Higashi
National Tuberculosis Controllers Association

Mr. Surajkumar Madoori
Treatment Action Group

Ms. Nuala Moore
American Thoracic Society

Dr. Robert Morris
National Commission on Correctional Health

Dr. Randall Reves
International Union Against TB and Lung Disease

Dr. Kathleen Ritger
National Association of County and City Health Officials

Ms. Susan Ruwe
Association for Professionals in Infection Control and Epidemiology

Dr. Lornel Tompkins
National Medical Association

Dr. Daphne Ware
Association of Public Health Laboratories

Mr. Bobby Watts
National Health Care for the Homeless Council

ACET Liaison Representatives Absent

Mr. David Bryden
RESULTS

Dr. Charles Daley
American Thoracic Society

Dr. Mayleen Ekiek
Pacific Island Health Officers Association

Dr. John Hellerstedt
Association of State and Territorial Health Officials

Dr. Ilse Levin
American Medical Association

Dr. Howard Njoo
Public Health Agency of Canada

Dr. Amee Patrawalla
American College of Chest Physicians

Dr. Gudelia Rangel
Mexico Section, US-Mexico Border Health Commission

Ms. Susan Rappaport
American Lung Association

Dr. Susan Ray
Infectious Disease Society of America

Dr. Michael Tapper
Society for Healthcare Epidemiology of America

ACET Designated Federal Officer

Dr. Hazel Dean
NCHHSTP Deputy Director

CDC Representatives

Cecily Campbell, JD
Dr. Terence Chorba
Dr. Tracy Dalton
Mr. Justin Davis
Ms. Molly Dowling
Ms. Imelda Garcia
Ms. Tracey Glascoe
Ms. Carla Jeffries
Dr. John Jereb
Ms. Stephanie Johnston
Ms. Kathryn Koski
Dr. Adam Langer
Dr. Philip LoBue
Ms. Allison Maiuri
Ms. Suzanne Marks
Dr. Jonathan Mermin
Mr. Roque Miramontes
Dr. Sapna Morris
Dr. Thomas Navin
Dr. Christina Phares
Ms. Margie Scott-Cseh
Ms. Maria Fraire Sessions
Ms. Shari Shanklin
Ms. Sarah Segerlind
Ms. Rebekah Stewart
Ms. Phyllis Stoll
Dr. Andrew Vernon
Dr. Carla Winston
Ms. Sara Zeigler

Guest Presenters

Dr. Douglas H. Esposito
US Department of Health and Human Services

Ms. Imelda Garcia
Texas Department of State Health Services

Members of the Public

Mr. Pete Dupree
National Tuberculosis Controllers Association

Dr. Anne Gaynor
Association of Public Health Laboratories

Ms. Dee Pritschet
North Dakota Department of Health

Ms. Donna Wegener
National Tuberculosis Controllers Association

Attachment 2: Glossary of Acronyms

Acronym	Definition
ACET	Advisory Council for the Elimination of Tuberculosis
ACF	Administration for Children and Families
ACIP	Advisory Committee of Immunization Practices
AHRQ	Agency for Healthcare Research and Quality
ATS	American Thoracic Society
BRFSS	Behavioral Risk Factor Surveillance System
CBA	Capacity-Building Assistance
CBOs	Community-Based Organizations
CDC	Centers for Disease Control and Prevention
CDPH	Chicago Department of Public Health
CfZ	Clofazimine
CGH	Center for Global Health
COI	Conflict of Interest
CPN	Capacity-Building Assistance Provider Network
CQI	Continuous Quality Improvement
CXR	Chest X-Ray
DAIDS	Division of AIDS (NIH)
DASH	Division of Adolescent and School Health
DFO	Designated Federal Officer
DHAP	Division of HIV/AIDS Prevention
DHS	(United States) Department of Homeland Security
DHUC	Division of Health for Unaccompanied Children
DMID	Division of Microbiology and Infectious Diseases (NIH)
DSHS	(Texas) Department of State Health Services
DTBE	Division of Tuberculosis Elimination
EI	Exceptional Item
FACA	Federal Advisory Committee Act
FDA	(United States) Food and Drug Administration
FQHC	Federally Qualified Health Centers
FY	Fiscal Year

Acronym	Definition
GRADE	Grading of Recommendation Assessment, Development and Evaluation
HAV	Hepatitis A Virus
HBV	Hepatitis B Virus
HCP	Healthcare Providers/Professionals
HCV	Hepatitis C Virus
HHS	(United States) Department of Health and Human Services
HIVMA	HIV Medical Association
ICE	(United States) Immigration and Customs Enforcement
ID	Infectious Disease
IDSA	Infectious Disease Society of America
IGRA	Interferon Gamma Release Assay
IME	Initial Medical Exam
IT	Information Technology
LAR	Legislative Appropriation Request
LDH	Local Health Department
LTBI	Latent Tuberculosis Infection
MDR-TB	Multidrug-Resistant Tuberculosis
MMWR	*Morbidity and Mortality Weekly Report*
MSM	Men Who Have Sex With Men
NACCHO	National Association of County and City Health Officials
NCHHSTP	National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention
NEDSS	National Electronic Disease Surveillance System
NHANES	National Health and Nutrition Examination Survey
NIAID	National Institute of Allergy and Infectious Diseases
NIH	National Institutes of Health
NTCA	National Tuberculosis Controllers Association
NTM	Non-Tuberculous Mycobacterium
OGA	(HHS) Office of Global Affairs
OMH	(HHS) Office of Minority Health
OSH	Office of Smoking and Health
PEPFAR	A President's Emergency Plan For AIDS Relief
PICO	Population, Intervention, Comparison, Outcomes
PZA	Pyrazinamide
SAMHSA	Substance Abuse and Mental Health Services Administration
SME	Subject-Matter Expert
SSP	Syringe Services Program
STD	Sexually Transmitted Disease
TA	Technical Assistance
TB	Tuberculosis
TBESC	Tuberculosis Epidemiologic Studies Consortium

Acronym	Definition
TBTC	Tuberculosis Trials Consortium
TCID	Texas Center for Infectious Disease
TLC	Teens Linked to Care
TST	Tuberculin Skin Test
UC	Unaccompanied Children
USAPI	United States-Affiliated Pacific Islands
CBP	US Customs and Border Protection
USMBHC	US-Mexico Border Health Commission
USPSTF	US Preventive Services Task Force
WG	Working Group
WHO	World Health Organization
YRBS	Youth Risk Behavior Survey
YRBSS	Youth Risk Behavior Surveillance System