Introduction

The Ad-Hoc Disease Transmission Advisory Committee met in Chicago, IL on 03/18/2019 to discuss the following agenda items:

1. Public Comment Update
2. U.S. Public Health Services (PHS) Increased Risk Designation (IRD) Definition Update
3. Manuscript, Abstract, and Case Study Reviews
4. New Project Ideas
5. CDC and DTAC Case Reviews
6. New Business

The following is a summary of the DTAC’s discussions.

1. Public Comment Update

DTAC reviewed the overall regional sentiment on their public comment proposal: Modify HOPE Act Variance to Include Other Organs.

Summary of discussion:

- Regions have unanimously strongly supported/supported the HOPE Act Variance proposal.
- The Patient Affairs Committee (PAC) supported the proposal, but requested more plain language that would allow all readers to understand the content.
- During the DTAC update presentation at regional meetings attendees:
  - Asked questions about the prevalence of Hepatitis C transmission through organ transplantation and sought data on reported cases.
  - Expressed the need for PHS Increased Risk designations to be reexamined and changed.
  - Focused on time sensitive and geographic diseases.

Next steps:

The United Network for Organ Sharing (UNOS) Staff will keep DTAC updated and informed on the overall sentiment towards the HOPE Act proposal. The Committee will meet and vote on final policy language to send to OPTN BOD for consideration at their June 2019 meeting.

2. U.S. Public Health Services (PHS) Increased Risk Designation (IRD) Definition Update

DTAC was asked to provide feedback on a presentation given by the Committee’s CDC ex-officio member which discussed potential changes to the PHS Increased Risk Designation (IRD) definition.

Data summary:

CDC and DTAC have received the following community feedback about the 2013 PHS Guideline:
• Too many donors are being designated IRD
• Organs are underutilized from IRD
• Risk designation of donors is not necessary because all donors are screened with Nucleic Acid Testing (NAT) and effective treatment is available
• Given adoption of universal NAT, 12 months is not evidence-based timeline
• “Increased Risk” nomenclature does not accurately portray risk of morbidity and mortality of accepting IRD organs
• Not all 12 IRD criteria increase the risk of transmission of viral blood borne pathogens

In response to this feedback, the CDC has conducted four analytic projects presented by the CDC Ex-Officio DTAC representative:

2. “Description of all CDC-led outbreak investigations (2014-2017) of HBV/HCV transmission through transplantation” (Accepted for publication in the American Journal of Transplantation)
3. Impact of Public Health Service Increased Risk Deceased Donor Designation On Organ Utilization—Analyzing data from the Organ Procurement and Transplantation Network (Under Review)
4. Model to describe risk of undetected HIV, HBV, and HCV infection among Public Health Service increased risk donors with negative NAT result (Under Review)

Summary of discussion:

DTAC will await the recommendation changes and then work to develop a proposal to align OPTN policy with these changes. DTAC has been following the increases in donors being designated increased risk and discussed that the current 12 criteria for IRD are broader than needed.

DTAC believes there has been an underutilization of organs as the terminology “increased risk” can lead patients to believe that there is a high chance of morbidity associated with the acceptance of these organs.

They discussed some of the findings from the four CDC analytic projects. The DTAC suggested that the 16% increase in increased risk donors with Hepatitis C is likely connected to the opioid epidemic.

The DTAC noted that most recipients who have had who were identified as having a disease transmission occurring through transplantation and treated did well. They noted that all IRD recipients should continue to be monitored post-transplant.

A member asked about the timing of patients being screened. Medical professionals must report on their patients at 6 and 12 months, but the exact time for screening is not explicit. This member suggested that medical professionals would like more guidance on when to screen and information on risk windows.

DTAC discussed that the CDC analysis suggests that there are hundreds of underutilized organs due to IRD designations including 148 kidneys each year.

Members asked several questions:

• What would happen if IRD designations were done away with?
• Would more organs be utilized and/or would the amount of unexpected transmissions increase? Would the ability to communication the condition of an organ decrease?
They asked how much terminology really matters to potential recipients. A comment was made that the reason for turndown is often multifactorial. Members discussed modeling the outcome of the removal of IRD designations and determined that this modeling would be ideal, but quite difficult. A member suggested that the reasoning for an increase in IRD donors would be different in each service area.

A member voiced concern about how many criteria there are for increased risk. It was noted that it would be better to have less criteria and that all risk is not created equal. There was concern about the transfer of correct information to doctors who then have to help their patient make the best decision.

While members considered removing any IRD, they realize that would not be feasible and some designation of risk is still needed. There was a call for more supportive education on IRD organs.

CDC examined IRD donors by risk behavior and time of NAT from most recent exposure. They looked at different risk behaviors and the number of days it would take for the infection to be detected. After testing a donor with NAT, a 1 in million residual risk of transmission occurs at 7 days post exposure for HCV, 14 days for HIV and 35 days for HBV.

CDC found that the period during which reported donor behaviors result in IRD designation can safely be shortened from the current 12 months and asked the committee for feedback on how long the timeframe should be.

Members voiced that they believe both 12 and 6 months for the risk factor to be included in the IRD to be too conservative. A member commented that 3 months was appropriate as this would allow time to observe a risk behavior. One month was also mentioned as an option.

CDC presented on the IRD criteria being considered for removal and sought DTAC’s input.

- Sexually Transmitted Diseases (STDs)

  The question was asked if a person with a newly diagnosed or receiving treatment for syphilis, gonorrhea, chlamydia, or genital ulcers in the last 12 months have a higher risk of acquiring a newly diagnosed HIV infection. It was noted that there is a connection between STDs and testing positive for HIV (with the exclusion of herpes). Members noted that if the risky behavior is sex then the risk remains and is dependent upon the amount of risky behavior. Members found that they needed to separate STDs due to amount and type of risk, but that if a family member was asked about a specific STD vs. STDs in general it may be hard for them to answer correctly. The DTAC also discussed 1 month vs. 3 months as a new benchmark.

- Hemodialysis:

  CDC analysis found no reported transmission of HCV from a donor with a history of hemodialysis. There have been 21 outbreaks of HCV in dialysis centers over last 10 years. All DTAC members agreed that that hemodialysis should be removed from IRD criteria.

- Hemodilution:

  Hemodilution can result in false-negative test. This has happened twice in organ transplantation with HIV being transmitted to two recipients although tests were negative. The greater the transfusion level then the longer the window period can be
(>40%) and can contribute to false negative test results. The DTAC supported eliminating hemodilution from IRD but the sentiment was not unanimous.

**Next Steps:**

The Advisory Committee on Blood and Tissue Safety and Availability (ACBTSA) will meet in April 2019. The CDC plans to present findings at Advisory Committee on Blood and Tissue Safety and Availability (ACBTSA) in April 2019. The committee will consider changing the term “increased risk”, discuss shortening the 12-month reporting period, and recommend the modification and/or removal of increased risk criteria.

Following this the CDC plans to draft revised recommendations and post in Federal Register for public comment in 2019 and publish a revised recommendation in 2020.

3. **Manuscript, Abstract, and Case Study Reviews**

Members gave updates and reviewed current projects:

**Summary of discussion:**

*Donor derived Hepatitis C in the era of increasing intravenous drug use.*

- Major Findings: 15 unexpected cases were proven/probable. 11 in window period.

*Outcomes from donors with reports of suspected and proven renal cell carcinomas (RCC).*

- Presented ACT 2018, rejected by AJT, and clinical transplantation asked for a number of changes.
- Resubmitted 2019 and currently responding to newest requests.
- Presenter commented that if it does not go through this time some may want to let the project go, but she believes that it would be better to continue to be persistent.

*A Decade of Donor- Derived Disease, 2008-2017.*

- ACT 2017 manuscript is close to being ready
- Cases reviewed: 2185, proven/probable: 335.

*Don’t Pass the Peanuts: Donor-derived Nut Allergy after Solid Organ Transplantation*

- Peanut allergies transmitted through transplantation.
- Currently working with pediatric allergist to get ready for publishing.

*Donor- Derived Cryptococcus: 10 Years.*

- Presented in 2018


- 19 proven/probable cases.
- Majority of donors that lead to proven/probable cases had risk factors for Strongyloides (Born outside of U.S or had traveled).
- 5 of 19 died all attributed to Strongyloides.

*Tuberculosis (TB) transmissions 2008-2017: ATC 2019 Poster*

- 9 donors transmitted Mycobacterium tuberculosis (MTB) to 11 organ recipients.
- Time to diagnosis: median 104 days.
- TB in first 4-5 months should lead to consideration for donor derived disease.
Next Steps:
DTAC will follow through with current requests on these projects.

4. New Project Ideas
Members discussed current and potential projects.

Summary of discussion:
A workgroup has been formed to look at multidrug resistant bacteria gram negative cases. CDC is participating.

DTAC is currently in search of topics for the quarterly update. Members were asked to submit ideas should they have them.

Next Steps:
DTAC will continue with their multidrug resistant bacteria project and seek other projects for the upcoming quarterly update.

5. CDC and DTAC Case Reviews
Confidential reviews.

Summary of discussion:
The committee went into closed session and conducted confidential medical peer reviews to adjudicate potential disease transmission events reported to the OPTN.

6. New Business

Summary of Discussion:
Members discussed current and potential projects.

A member recently presented at a Region 7 transplant infectious disease conference and reported on comments and questions for DTAC:

- A call for an increased and uniform method of sharing of information between transplant centers when they suspect a disease or infection has been transmitted. This idea was approved and allows programs to contact one another when involved in the same report.
- Conference attendees asked about sharing adjudication results more widely. This has been an issue in the past and was decided against due to potential unintended consequences and legal ramifications (e.g. unintentional donor identification) should confidential information be revealed. It was reported that DTAC’s main purpose is to use the review findings to inform policy.
- The group suggested to require candidates who say no to an IRD donor to be consulted to make sure they have an understanding of this designation.
- If hospitals are known for turning down IRD donors, the group suggested to bring an infectious disease staff member into meetings to educate institutions on the limitation they could be placing on their patients.
- The group suggested to look at the kind of data that is being collected now and to think about what is missing and what else could be included. This could make follow up and recommendations easier.
- The OPO community voiced concern over reflexive reporting by transplant centers or other OPOs. If a potential transmission occurs it is automatically reported. When this happens, the tissue bank receives notification as well. The tissue bank cannot use the tissue (even if the organ is excluded or not a case) immediately without waiting for a final
adjudication. This can result in tissue discards when the tissue could have been safely used.

- The group voiced that more education on the HOPE Act is needed to make sure that donor hospitals know that HIV positive patients are not automatic rule outs.
- The group suggested creating a map of the U.S. on endemic disease. This is relevant with the increase of organs that are flying and the need for medical professionals to be aware of diseases they have not dealt with before.

Upcoming Meetings

- April 22, 2019 (teleconference)
- May 20, 2019 (teleconference)
- June 17, 2019 (teleconference)