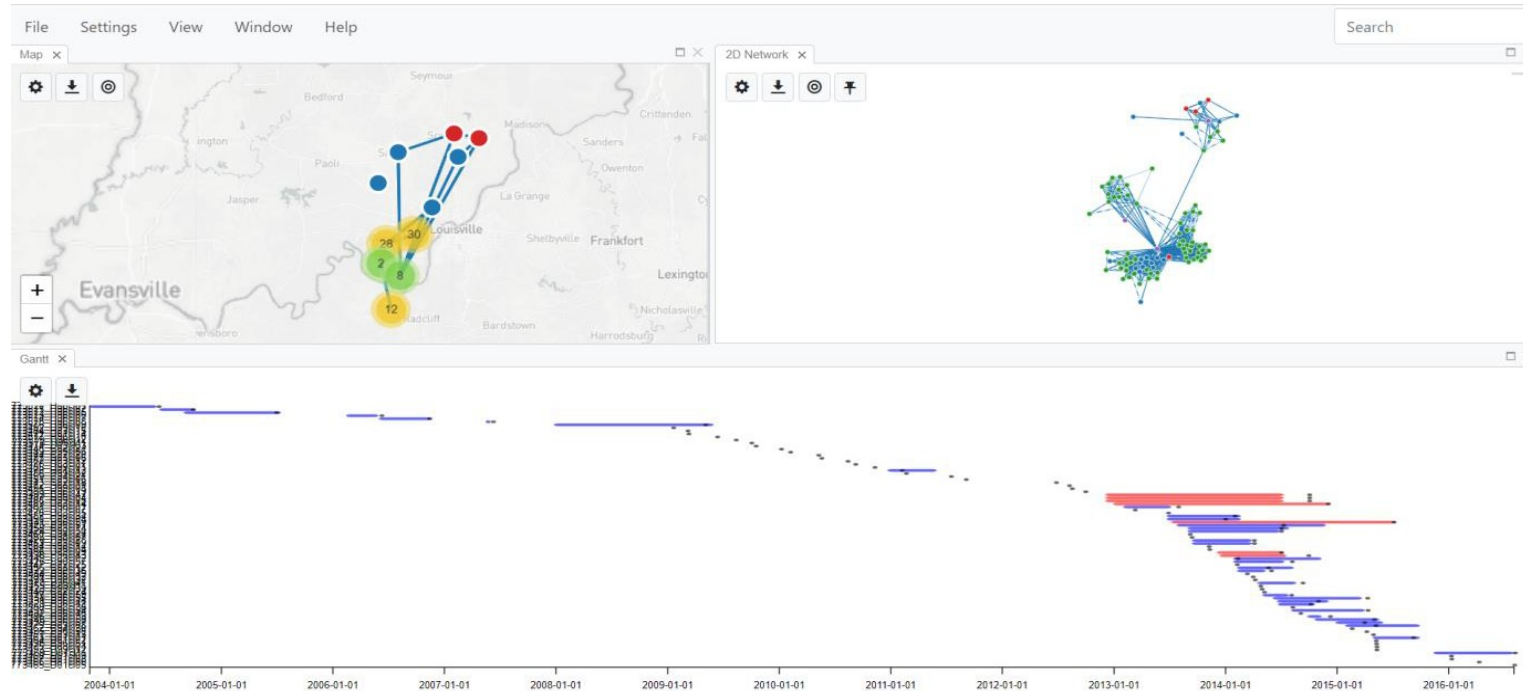


MicrobeTrace



What: **MicrobeTrace** is a web-based tool to visually render networks from surveillance, epi investigations, and genetic analyses. Using simple point-and-click interfaces, data can be readily imported, integrated and visualized...no coding required!

Why: Networks are rich with sensitive data that are hard to visualize without specialized programming skills or tools that required sending data over the web. **MicrobeTrace** provides ready-access to visuals for fact sheets, publications and communiques.

How: **MicrobeTrace** is delivered by a modern* web browser, but runs locally on your computer or laptop. This means data and analyses are not sent over the web.
*Developed for Google Chrome, does not work in Internet Explorer

Where: **MicrobeTrace:** <https://microbetrace.cdc.gov>
Documentation: <https://github.com/CDCgov/MicrobeTRACE/wiki>
Example Files: <https://github.com/CDCgov/MicrobeTrace/tree/master/demo>
Support: microbetrace@cdc.gov
Training Video: https://www.youtube.com/watch?v=5E-_Kb7yvHU

Who: Developed by the Molecular Epidemiology and Bioinformatics Team in the Laboratory Branch of the Division of HIV/AIDS Prevention at CDC.

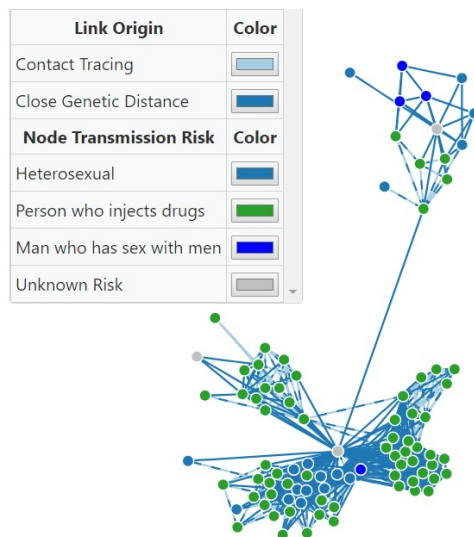
Other interactive and interoperable views

- 2D Network
- 3D Network
- Histogram
- Table
- Aggregation
- Bubbles
- Flow Diagram
- Scatterplot
- Waterfall
- Map
- Globe
- Gantt
- Timeline
- Heatmap
- Phylogenetic Tree
- Sequences

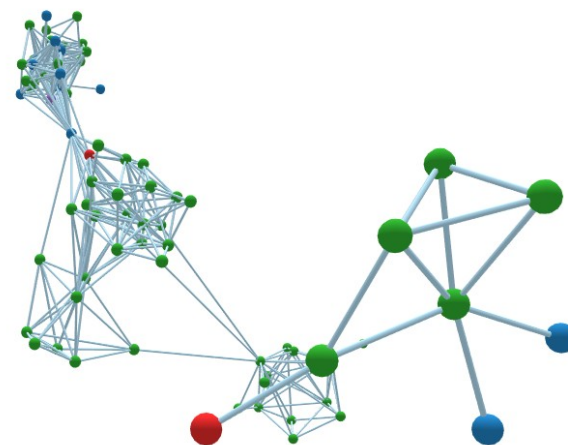
Any combination of input files can be used:

- **Node Lists(s)** =
line-list of people or places
- **Edge List(s)** =
connections between people or places
- **Sequence file(s)** =
microbial genomic sequences
- **Distance matrix** =
pairwise genetic distances
- **Tree file** =
independent phylogenetic analysis

2D Network



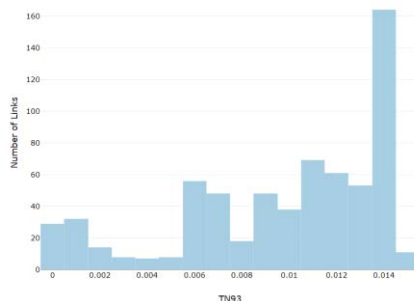
3D Network



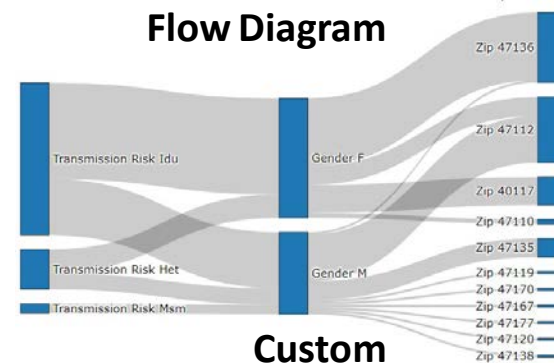
Global Network



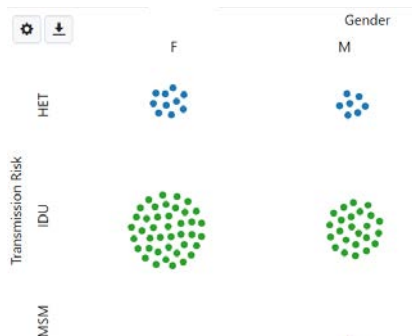
Custom Histogram



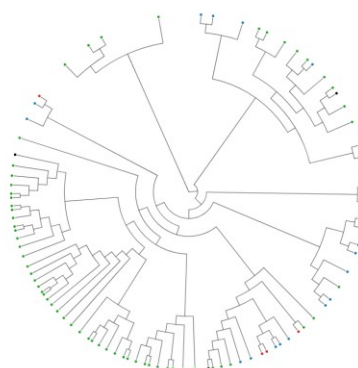
Flow Diagram



Bubbles Matrix



Phylogenetic Tree



Aggregate Report

Aggregation	Ion Risk	Number of Nodes	Percentage
Tables	Node Transmission Risk	1	1.140%
	Node Zip	17	19.54%
	Node Gender	65	74.71%
	Node Gender	4	4.588%
Add Variables			
40117	Node Transmission Risk	1	1.140%
	Node Zip	12	13.793%
	Node Gender	2	2.299%
	Node Gender	28	32.184%
	Node Transmission Risk	1	1.140%
	Node Zip	1	1.140%
	Node Gender	8	9.195%
	Node Gender	30	34.483%
	Node Transmission Risk	1	1.140%
	Node Zip	1	1.140%
	Node Gender	1	1.140%
	Node Gender	1	1.140%
	Node Gender	1	1.140%
Node Gender	Node Transmission Risk	1	1.140%
	Node Zip	51	58.621%
F	Node Transmission Risk	1	1.140%
	Node Zip	35	40.23%