

COVID-19 Data Initiatives

INDIANA DEPARTMENT OF CORRECTION

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"It is a capital mistake to theorize before one has data."

- SIR ARTHUR CONAN DOYLE

COVID-19 Data Initiatives

- Disease Progression Projections
- Dashboards
- Social Network Analysis

Disease Progression Projections

Disease Progression Projections

- Produced a projection for possible impact for offenders and staff
 - Facility specific
 - Department-wide
- Included Information
 - Basic staff, offender, and facility information
 - Projections (77 day disease progression)
 - Exposed
 - Infectious
 - Hospitalized
 - Fatalities



Indiana State Prison

FACILITY-SPECIFIC PROJECTION







364 prisoners over 55



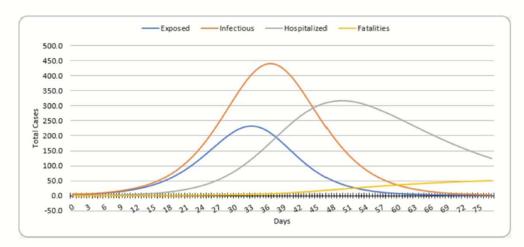
Prisoners housed in cells and dorms*



495 staff work In the facility



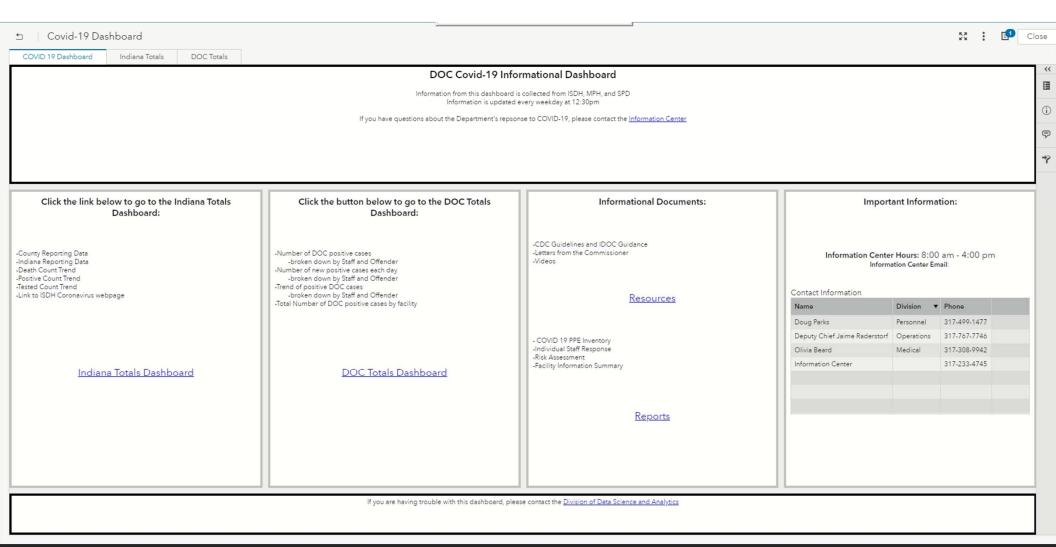
140 COVID-19 cases nearby counties

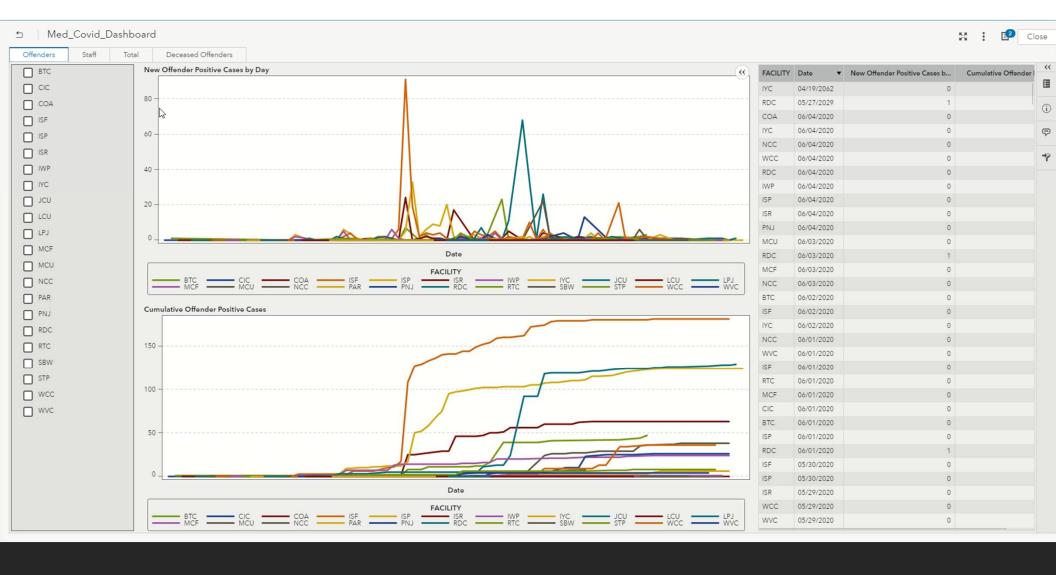


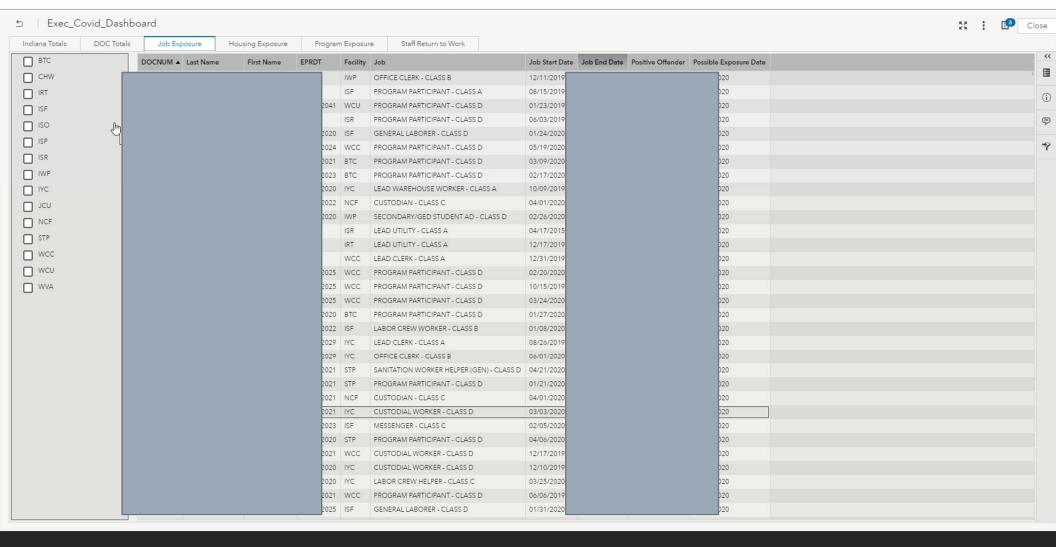
Day 0-4/21 *model assumes cells

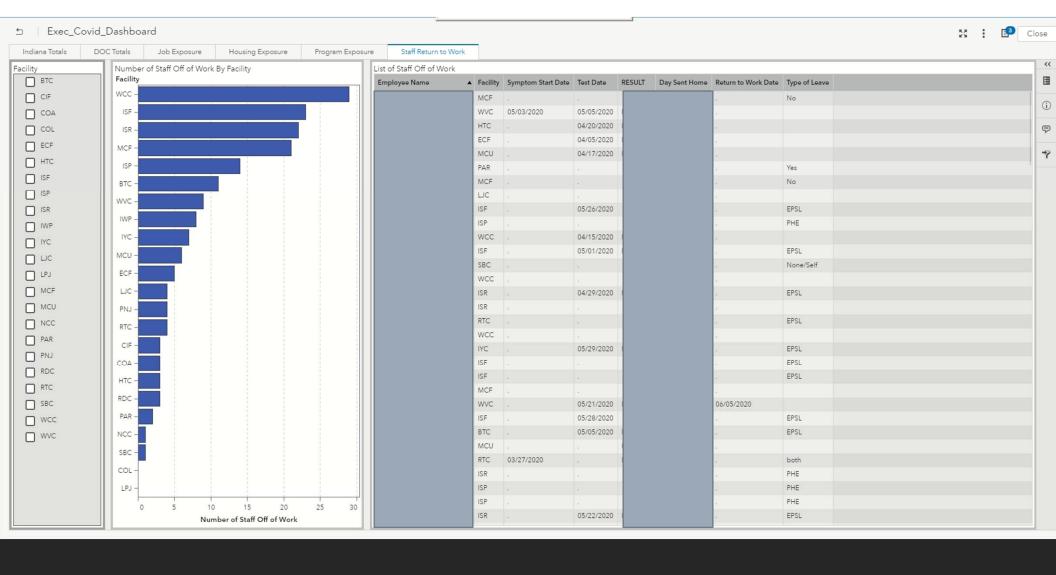
	Impact Projections			
	In 1wk	In 2wk	In 3wk	Overall
Incarcerated population (totals)				
Cases	34	117	359	2,543

Dashboards





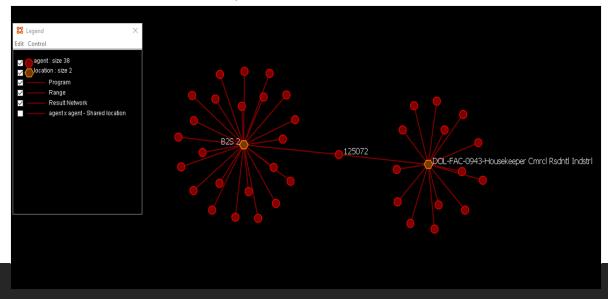




Social Network Analysis

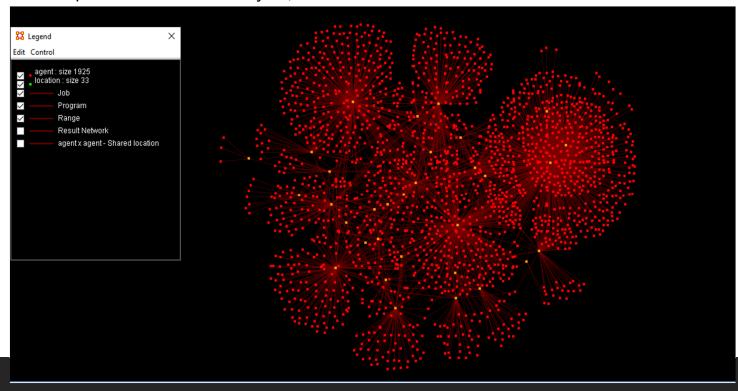
Social Network Analysis (SNA) – Offender Analysis

- •Social Network Analysis used housing, program, and work assignment data to create networks of probable contact by offenders within various effected facilities.
 - Example:
 - Ego network formed for an offender who had tested positive. At the level of direct contact he had encountered 38 other inmates.



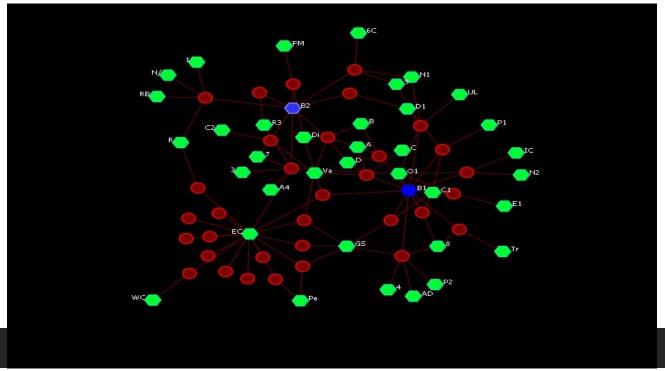
Social Network Analysis (SNA)

•At just one step removed in the analysis, over 1900 inmates had indirect contact with him.



Social Network Analysis (SNA) – Staff Analysis

•Staff were also a problem in that they moved between units, thus minimizing the effectiveness of restricting movement for the offenders.



Questions?

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