

HIV Cluster Among Injection Drug Using Population in Northern Kentucky



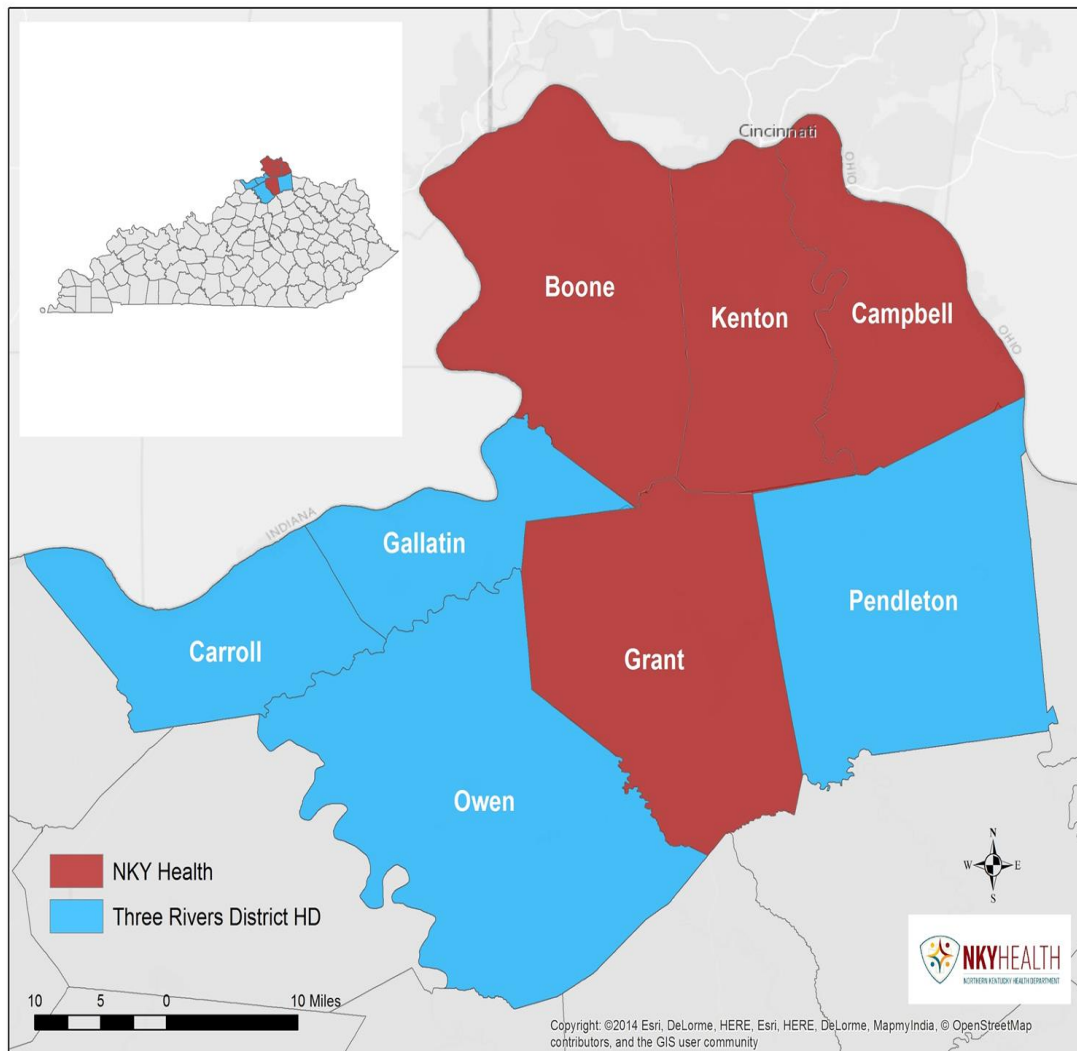
Human Immunodeficiency Virus (HIV)

- Viral infection that attacks the immune system
- Transmission is through blood/body fluid exposures
 - Typically men who have sex with men (MSM)
 - Heterosexual sex
 - Re-using syringes
- Chronic infection
- Long-term infection leads to Acquired Immunodeficiency Disorder (AIDS)
- Kentucky has a high rate of “Concurrent Diagnosis”
 - HIV and AIDS diagnosed concurrently

Background

- November 2017: DPH detected increase in HIV cases in Northern Kentucky Area Development District (NKY ADD) with injecting drug use (IDU) as primary risk factor
- Northern Kentucky District Health Department, Three Rivers District Health Department, and CDC were contacted
 - Cluster investigation was initiated
 - Expanded interview
 - Additional specimen collection for genotype testing
 - Case definition:
 - Any newly confirmed HIV infection identified on or after January 1, 2017 who reported injection drug use and living in NKY ADD or epidemiologically linked to another confirmed case in the NKY ADD

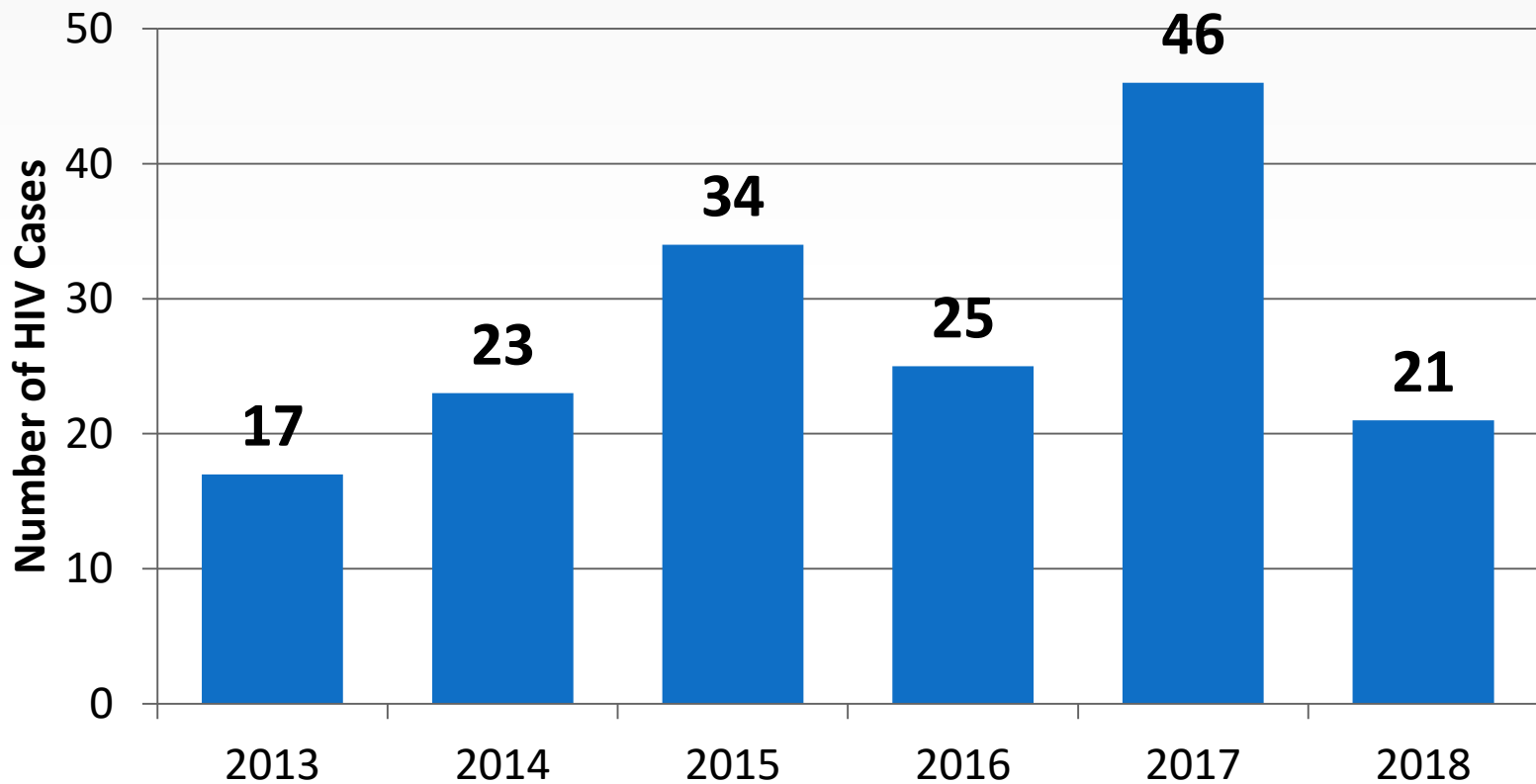
Northern Kentucky ADD



Cluster Investigation Response

- Weekly calls with NKY health department to review data
 - Total number of cases
 - Risk factors
 - Co-infections
 - Expanded interviews and specimen collection status
- Enhanced surveillance statewide
 - Bi-weekly analysis of cases
 - Total number per county
 - Risk factors by county
- Contacted Ohio Dept. of Health and Hamilton County (OH) Public Health
- Regular calls with the CDC and a site visit March 26 -27, 2018

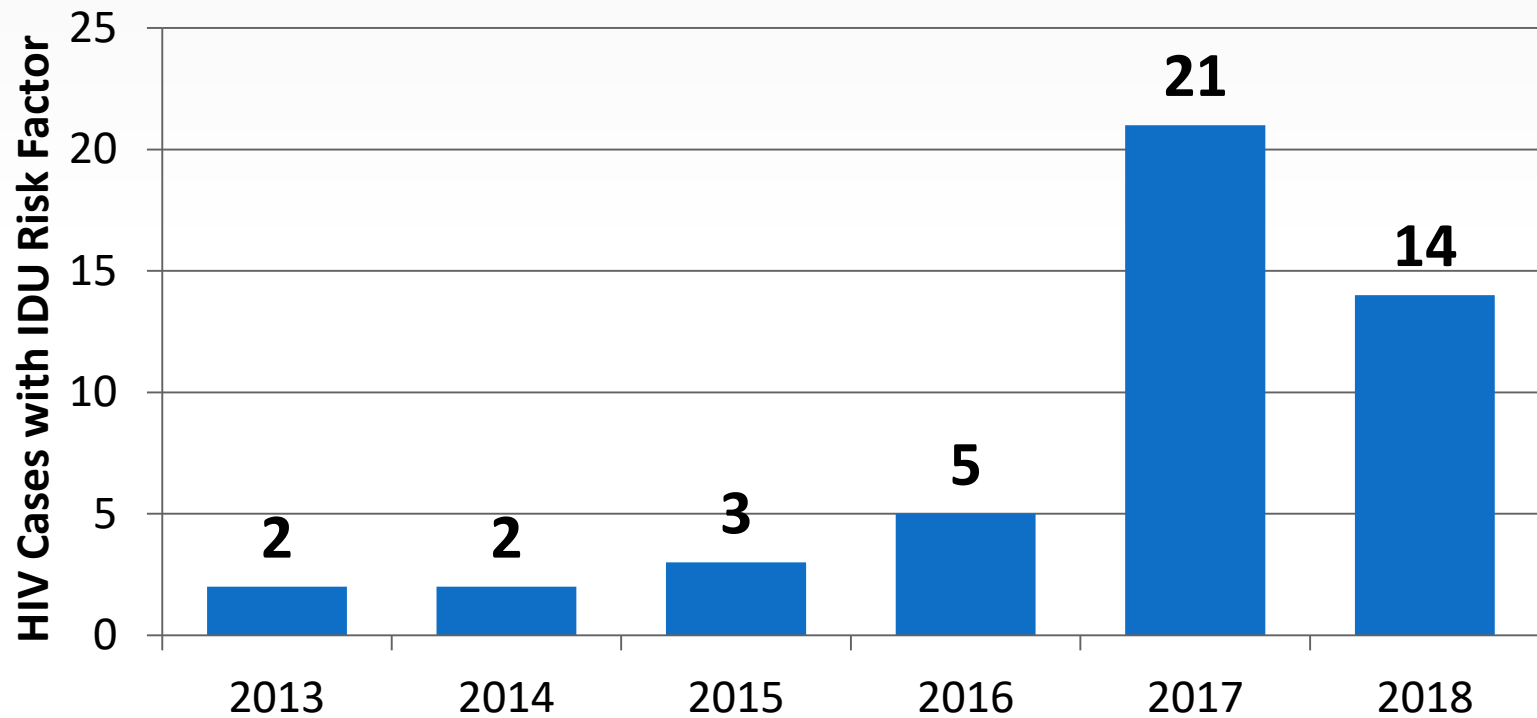
Total Number of HIV Cases for NKY ADD



Data current as of July 16, 2018

HIV Cases with IDU as a Risk Factor

NKY ADD



Data current as of July 16, 2018

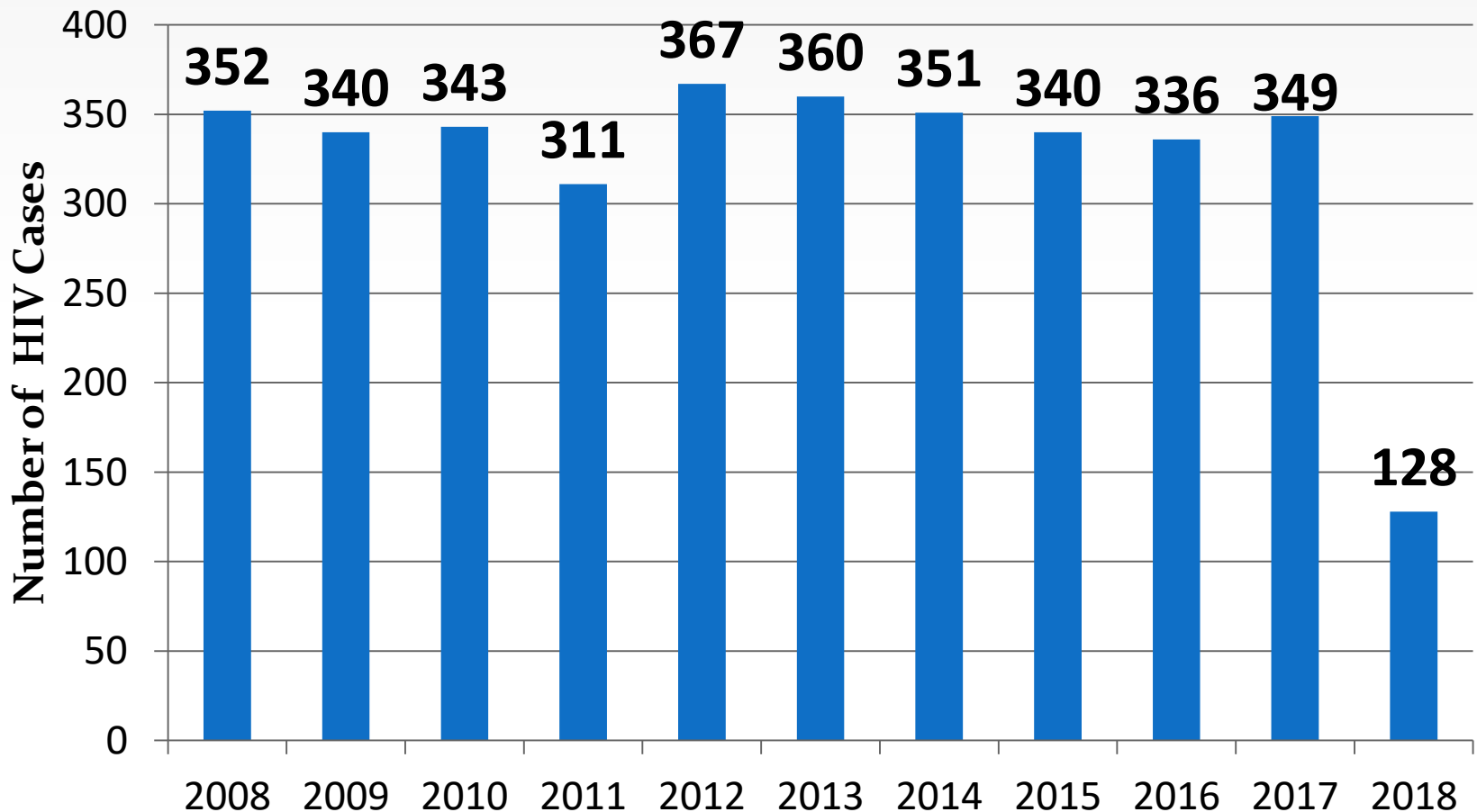
Outbreak Statistics

- 2015 HIV cases, NKY ADD: 34 IDU: 3 (9%)
- 2016 HIV cases, NKY ADD: 25 IDU: 5 (20%)
- 2017 HIV cases, NKY ADD: 46 IDU: 21 (46%)
- 2018 HIV cases, NKY ADD: 21 IDU: 14 (**50%**)
(Up to July 16, 2018)
- For HIV/IDU cluster cases – 35 in 2017-18:
 - Male: 24 (69%)
 - Age 20-29: 16 (46%) → 80% in 20-39 age group
 - Caucasian: 32 (91%)
 - Deceased: 2 (6%)

New vs. Previous Infections?

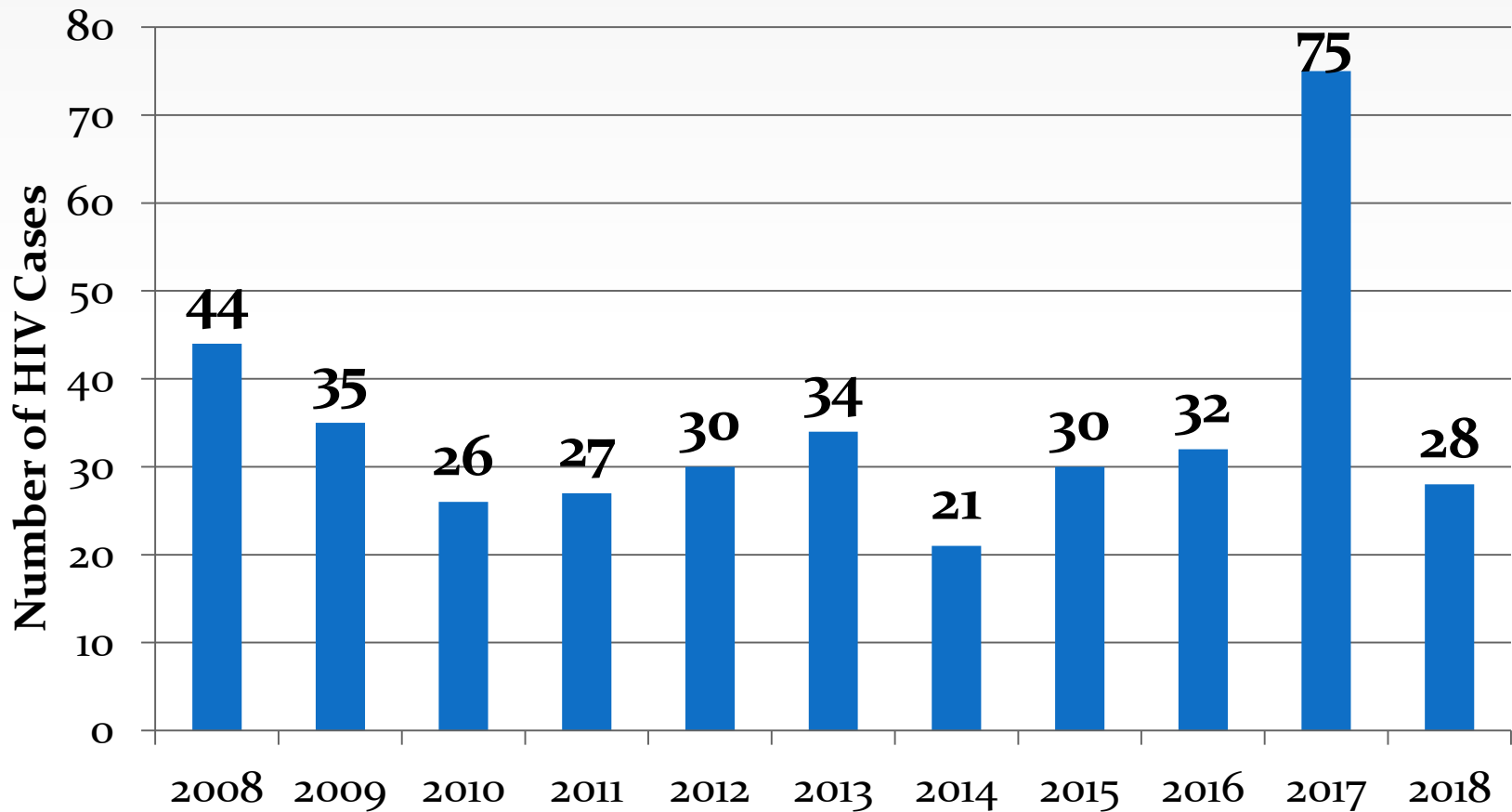
- Finding old cases or new transmission?
- CDC testing indicates some recent transmission
 - About 42% of 26 specimens
- Two genetically-linked clusters identified
 - Cluster A: 5 KY + 3 OH sequences
 - Cluster B: 2 KY + 3 OH sequences
- Not all testing completed

New HIV Disease Cases Diagnosed Among Kentucky Residents



Data current as of July 16, 2018

New HIV Disease Cases Diagnosed Among Kentucky Residents Reporting Risk of IDU



Data current as of July 16, 2018

Future Steps

- Continue investigation – contact investigation
- Enhance detection statewide for IDU
- Link cases to care → viral suppression
- Identify transmission patterns
 - Target prevention messaging/education
 - Reduce risk of transmission
- Expand testing
 - Syringe service programs
 - Substance abuse treatment and counseling



Questions?