New Mexico
Emerging Infections Program

Healthcare-Associated Infections Community Interface

Extended-spectrum β-lactamase-producing Enterobacterales (ESBL-E)

Surveillance Report, 2020-2024

Bernalillo County, New Mexico

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Extended-spectrum β-lactamase-producing Enterobacterales (ESBL-E) Surveillance Report, Bernalillo County, 2020 to 2024

Overview:

The World Health Organization identified antimicrobial resistance (AMR) as a top global public health threat, placing modern medicine at risk of no longer being able to treat or prevent infections in humans and animals (1). Nationally and worldwide, AMR infections cause significant morbidity and mortality and are predicted to increase at an alarming rate (1-3). Enterobacterales, which includes gram-negative bacteria such as *Escherichia coli* (*E. coli*), *Klebsiella pneumoniae (K. pneumoniae)*, and *Klebsiella oxytoca (K. oxytoca),* have a propensity for sharing AMR genes, even across different bacteria species. Certain genes can give the bacteria an ability to produce extended-spectrum β-lactamase (ESBL) enzymes that break down the chemical structure in commonly prescribed antibiotics such as penicillins and cephalosporins, rendering many of them ineffective (4).

Healthcare providers treating severe or complicated ESBL Enterobacterales (ESBL-E) infections face limited treatment options and must increasingly rely on "last-resort" antibiotics such as carbapenems. For these reasons, the Centers for Disease Control and Prevention (CDC) classified ESBL-E infections as a serious threat, responsible for an estimated 197,000 cases, 9,100 deaths, and $1.2B in attributable healthcare costs in the U.S. in 2017 (2). Though commonly associated with exposure to healthcare, ESBL-E infections are diagnosed in otherwise healthy individuals with relative frequency and some individuals may even be colonized. ESBL-E can spread from person-to-person through dirty hands or contaminated surfaces, but fortunately, transmission can be reduced with good hand hygiene, sanitation, and infection prevention practices (5).

Beginning July 2019, the New Mexico Emerging Infections Program (NM EIP) Healthcare-Associated Infections - Community Interface (HAIC) initiated ESBL-E surveillance to gather demographic, clinical, and outcome data to estimate overall burden of disease and identify populations at risk of infections or severe outcomes. This report provides a 5-year summary of ESBL-E infections, both healthcare- and community-associated, in Bernalillo County. Surveillance of these infections would not have been possible without the efforts of many public health partners, including the University of New Mexico (UNM), New Mexico Department of Health (NMDOH), Bernalillo County healthcare facilities (e.g. outpatient clinics, acute and long-term acute care hospitals, long-term care facilities), public health and clinical reference laboratories, as well as CDC and five other EIP sites nationally.

Population:

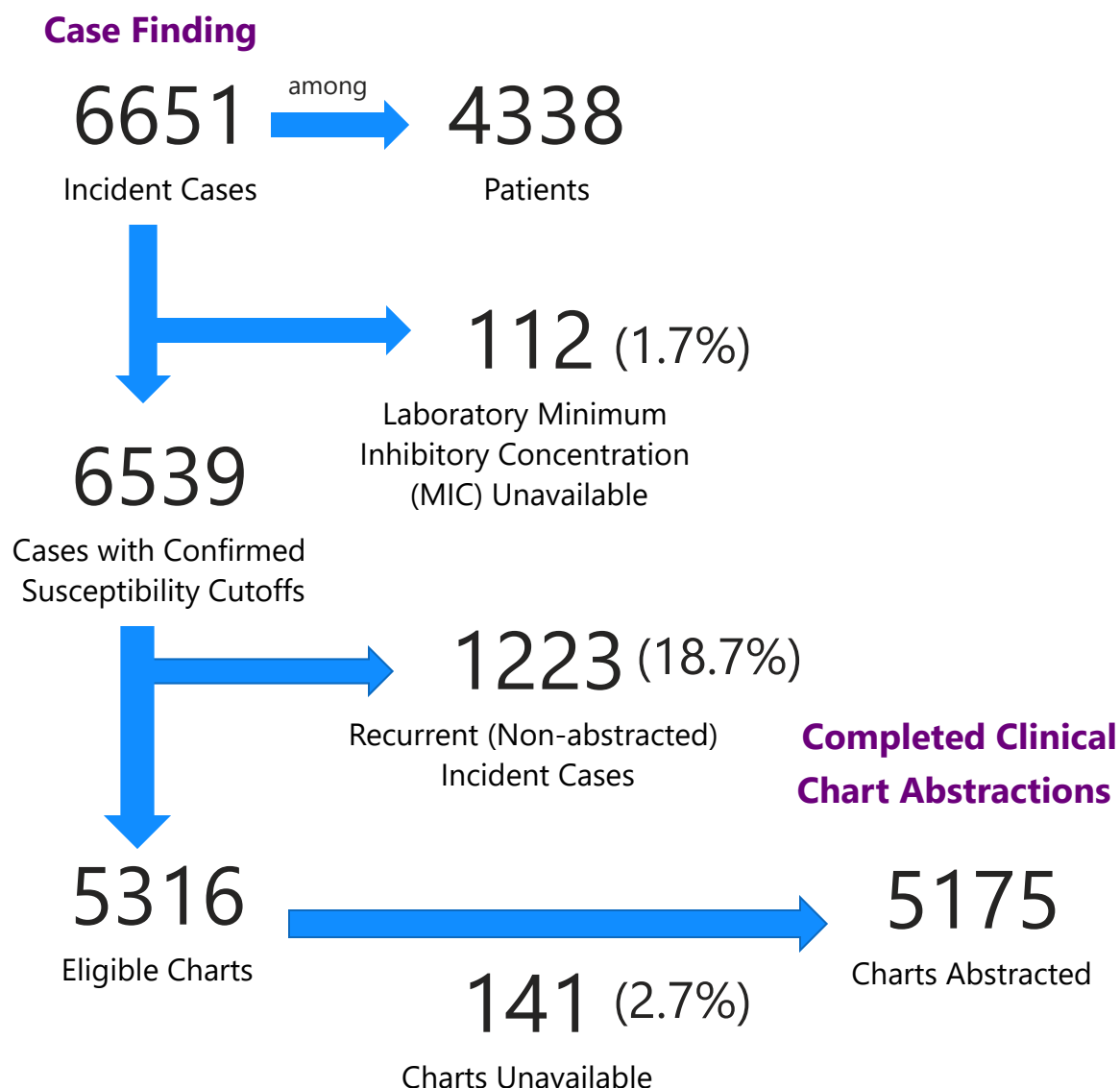The surveillance area, Bernalillo County, represents 676,452 persons.
Source: Population estimates were obtained from the U.S. Census Bureau, Population Division, Annual County Resident Population Estimates by Age, Sex, Race and Hispanic Origin, April 1, 2020 - July 1, 2023 (6).

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Case Definition:

An extended-spectrum beta-lactamase (ESBL)-producing Enterobacterales (ESBL-E) case is defined as isolation of *E. coli*, *K. pneumoniae*, or *K. oxytoca* with the following criteria:

- Carbapenem non-resistant (i.e., susceptible or intermediate) (doripenem, imipenem, meropenem, or ertapenem) using the current Clinical and Laboratory Standards Institute clinical breakpoints (7)

- Isolated from a normally sterile body specimen (e.g., blood, cerebrospinal/pleural/pericardial/peritoneal/synovial fluid, bone, muscle, other internal body site) or urine; and

- Identified in a resident of Bernalillo County, New Mexico, the predetermined surveillance area

Case Finding

6651 Incident Cases → among → 4338 Patients

→ 112 (1.7%) Laboratory Minimum Inhibitory Concentration (MIC) Unavailable

6539 Cases with Confirmed Susceptibility Cutoffs

→ 1223 (18.7%) Recurrent (Non-abstracted) Incident Cases

Completed Clinical Chart Abstractions

5316 Eligible Charts → 5175 Charts Abstracted

141 (2.7%) Charts Unavailable

Extended-spectrum β-lactamase (ESBL)-producing Enterobacterales (ESBL-E) Surveillance Report, Bernalillo County, 2020 to 2024

Methods:

NM EIP conducts active, population-based surveillance of lab-confirmed ESBL-E cases. Clinical laboratories serving residents of Bernalillo County identify positive ESBL-E isolates by querying automated testing instruments (ATIs) for minimum inhibitory concentration (MIC) values, which define levels of antimicrobial resistance or susceptibility. To ensure complete case ascertainment, EIP staff audit laboratories at least annually. An incident ESBL-E case was defined as the first ESBL-E isolate meeting case definition during a 30-day period; therefore, patients could have more than one case per calendar year.

Upon receipt of a positive lab report, NM EIP staff review medical records from healthcare facilities (outpatient clinics/ERs, long-term care facilities (LTCF), long-term acute care hospitals (LTACH) and acute care hospitals) and complete a standardized case report form. Data collected include patient demographics, underlying medical conditions, clinical characteristics and infection types associated with the culture, healthcare and select risk factors, and patient outcomes. Though a patient could have multiple incident infections during a calendar year, only medical records for the first urine isolate were abstracted. Descriptive statistics for population demographics and isolates are based on all incident cases (n=6,651); whereas calculations for clinical risk factors and outcomes are limited to cases whose medical records were abstracted (n=5,175). Cases were classified as healthcare-facility onset (vs. community-onset) if the case had: (1) a specimen collected >3 calendar days after admission to an acute care facility; (2) surgery, dialysis, a prior hospital admission or resided in a healthcare facility LTCF, LTACH in the past year; or a central line, urinary or other catheter in the 2 days prior to specimen collection.

This public health surveillance project was reviewed by UNM Human Research Protections Office (UNM HRPO #13-333) and Presbyterian Healthcare Services Institutional Review Board (PHS IRB #1457164) and given a Not Human Subjects Research determination.

Acknowledgment of Support and Disclaimer:

Extended-spectrum β-lactamase (ESBL)-producing Enterobacterales (ESBL-E) Surveillance in Bernalillo County, 2020 to 2024

Summary of Findings

Cases and Incidence:

ESBL-E cases increased by 37% over the past 5 years from 1,150 cases in 2020 to 1,580 cases in 2024 in Bernalillo County (Figure 1a). Monthly cases counts (with the exception of one month) in 2024 were the highest reported over the past 5 years (Figure 1c). The overall crude incidence rate of ESBL-E infections ranged from 170 to 235 cases per 100,000 population (2020 and 2024, respectively) (Figure 1a). Increases over time were observed regardless of age group, sex and race/ethnicity. Females were 3x more likely than males to have an ESBL-E; however, since 2020, the proportion of male cases increased (21% in 2020 to 24% in 2024) (Figure 2c). Incidence rates increased with age with the age group 65 years and older representing nearly half (49%) of cases (Table 3, Figure 3a). Persons 85 years and older experienced the highest burden of infection (1,280 cases per 100,000) followed by persons 75 to 84 years of age (692 per 100,000); however, increases were observed in all age groups from 2020 to 2024 (Figure 3a). Hispanics (regardless of race) represent almost half (49%) of cases in Bernalillo County. The crude incidence rate (186 per 100,000) among Hispanics is comparable to non-Hispanic American Indian or Alaskan Natives (194 per 100,000) and higher than non-Hispanic White (161 per 100,000) (Figure 4a); these rates should be interpreted with caution due to small population sizes.

Organism:

The majority of specimens collected were urine (95%), followed by blood (4%) and other sterile sites (1%) (Table 5). *E. coli* was the bacteria identified in 80% of ESBL-E specimens followed by *K. pneumoniae* (16%) and *K. oxytoca* (5%) (Figure 5a). Since 2020, *E. coli* and *K. pneumoniae* have increased (34% and 68%, respectively); whereas *K. oxytoca* has remained stable (Figure 5b).

Patient Residence and Testing Location:

The majority of patients (86%) cases were residing at their private residence 3 days prior to testing positive for ESBL-E while 12% of cases resided in a LTCF, LTACH or acute-care hospital (Figure 6a). The proportion of cases tested in inpatient locations (13%) has remained stable since 2020 with outpatient and emergency departments increasingly performing the majority of specimen collection (84% in 2024) (Table 6, Figure 6b).

Infection Types:

The majority of patients presented with urinary tract infections (UTIs) (76%) followed by bacteremia (9%), sepsis (8%), pyelonephritis (5%), septic shock and urosepsis (2%) (Table 7), though collection of urosepsis and sepsis infection types began in 2024. The proportion

Extended-spectrum β-lactamase (ESBL)-producing Enterobacterales (ESBL-E) Surveillance in Bernalillo County, 2020 to 2024

Summary of Findings

Infection Type (continued):

of infection types have remained relatively stable over the years; however, pyelonephritis diagnoses have increased slightly (4% to 7%) (2020 to 2024, respectively) (Figure 7b). Colonization with ESBL-E was indicated in 3% of cases. However, most ESBL-E cases (86%) were associated with a diagnosed infection type.

Underlying Medical Conditions:

Most ESBL-E cases (76%) had at least one underlying medical condition (Figure 8a). Chronic metabolic disorders represented the most prevalent underlying medical condition (26%), followed by neurologic conditions and cardiovascular disease (19%), urinary tract abnormalities (18%), and chronic lung disease (17%) (Table 8). The high proportion of chronic medical conditions among cases likely reflects half of cases being aged 65 years or older. However, nearly one fifth of cases had urinary tract problems/abnormalities. The proportion of these cases increased from 16% (2022) to 20% (2024) and represents a population likely at higher risk of infection (Figure 8b). A list of condition/condition groups is provided in the Appendix.

Healthcare Exposures and Risk Factors:

Over forty percent of cases had no healthcare- or travel-related risk factors for ESBL-E infection. The most commonly reported risk factors were acute care hospitalization (36%), and recurrent UTIs (26%) in the year prior to the positive ESBL-E lab result (Table 9, Figure 9a). Other healthcare exposures included residing in a long-term care facility (LTCF) or long-term acute care hospital (LTACH) in the past year (14%). Approximately 4% of cases were classified as hospital-onset with the specimen collected at least three days after their admission (Table 9). Invasive procedures and catheters are a known risk factor for healthcare-associated infections. Approximately 15% of cases had surgery in the year prior to specimen collection and 14% had a urinary catheter in the two days prior to specimen collection (Table 10, Figure 10). Of cases with ESBL-E, 4% had central venous catheters and 2% percent were on dialysis (Table 10, Figure 10).

Outcomes and Discharge Location:

In 2024, 32% of cases were hospitalized the day of or in the 29 days following their positive ESBL-E lab result (Figures 11a). Among 1,588 hospitalized patients with ESBL-E infections, 15% were admitted to the intensive care unit (ICU) and 7% died during hospitalization; however, severe outcomes were less common when non-hospitalized cases are included (5% ICU and 2% overall mortality) (Figure 11b, 11c, 12a, 12b). Two-thirds of patients discharged from the hospital returned to their private residence; however, more than a quarter of patients went to LTCFs (28%) (Table 12).

Extended-spectrum β-lactamase (ESBL)-producing Enterobacterales (ESBL-E) Surveillance in Bernalillo County, 2020 to 2024

Summary of Findings

Antibiotics:

Prior antibiotic use is a risk factor for ESBL-E infection. Antibiotics were prescribed to 28% of cases in the 30 days prior to the ESBL-E infection with cephems identified as the most prevalent (13%), followed by beta-lactam combination agents (6%) and folate pathway antagonists (4%) in 2024 (Figure 13a, Table 13). The proportion of cases prescribed different antibiotic classes did not change significantly over the 5-year period; though a slightly higher proportion of patients received cephems (14% in 2024 vs. 13% in 2020) and beta-lactam combination agents (6% in 2024 vs. 5% in 2020). The proportion of cases receiving carbapenems was 1% in 2024 (Figure 13b).

Discussion:

Rates of ESBL-E have increased substantially in Bernalillo County since 2020, the first full year of HAIC surveillance for ESBL-E infections in New Mexico. Increases in incidence were observed across all age groups, sex and race/ethnicities. Demographic risk factors for infection included older age and being female. Hispanic and non-Hispanic AIAN populations had higher rates of ESBL-E than non-Hispanic whites, though these rates should be interpreted with caution. A high proportion of cases had underlying medical conditions and recent healthcare exposures. These risk factors highlight opportunities for identifying populations at risk for implementing strong infection control practices (e.g. hand hygiene, isolation practices, low-level disinfection). The majority of ESBL-E cases were tested at outpatient clinics or ERs and were not hospitalized, emphasizing the importance of infection control and antibiotic stewardship in ambulatory settings.
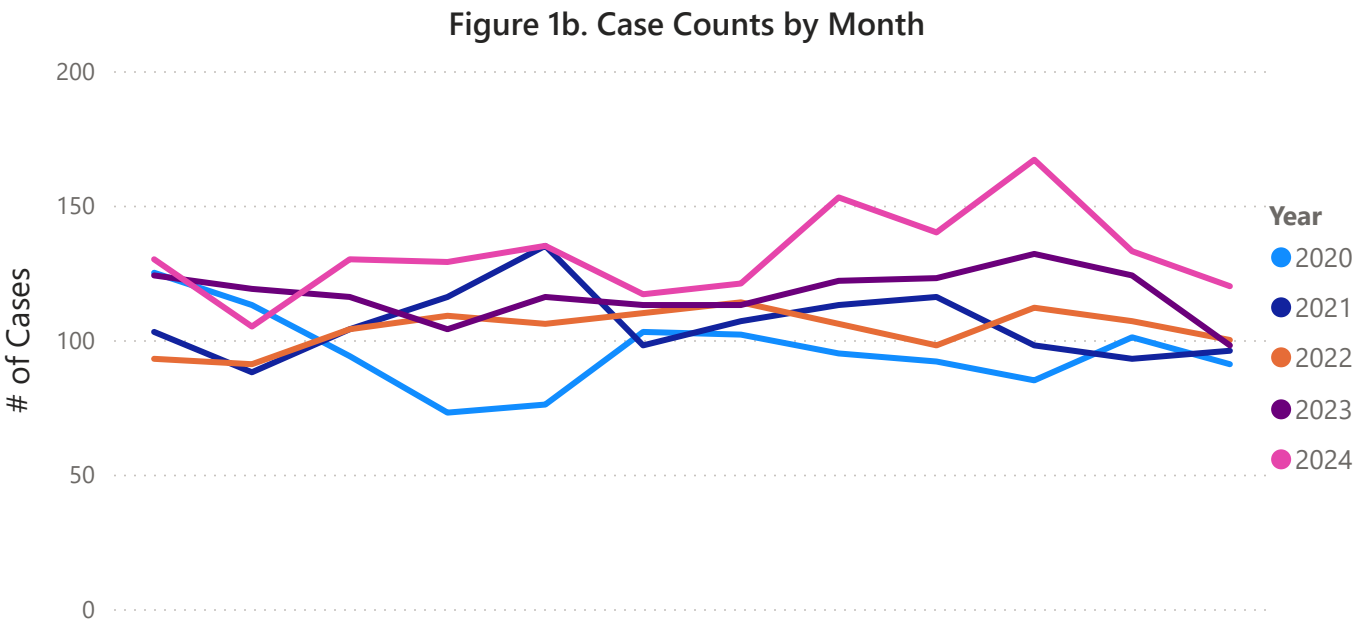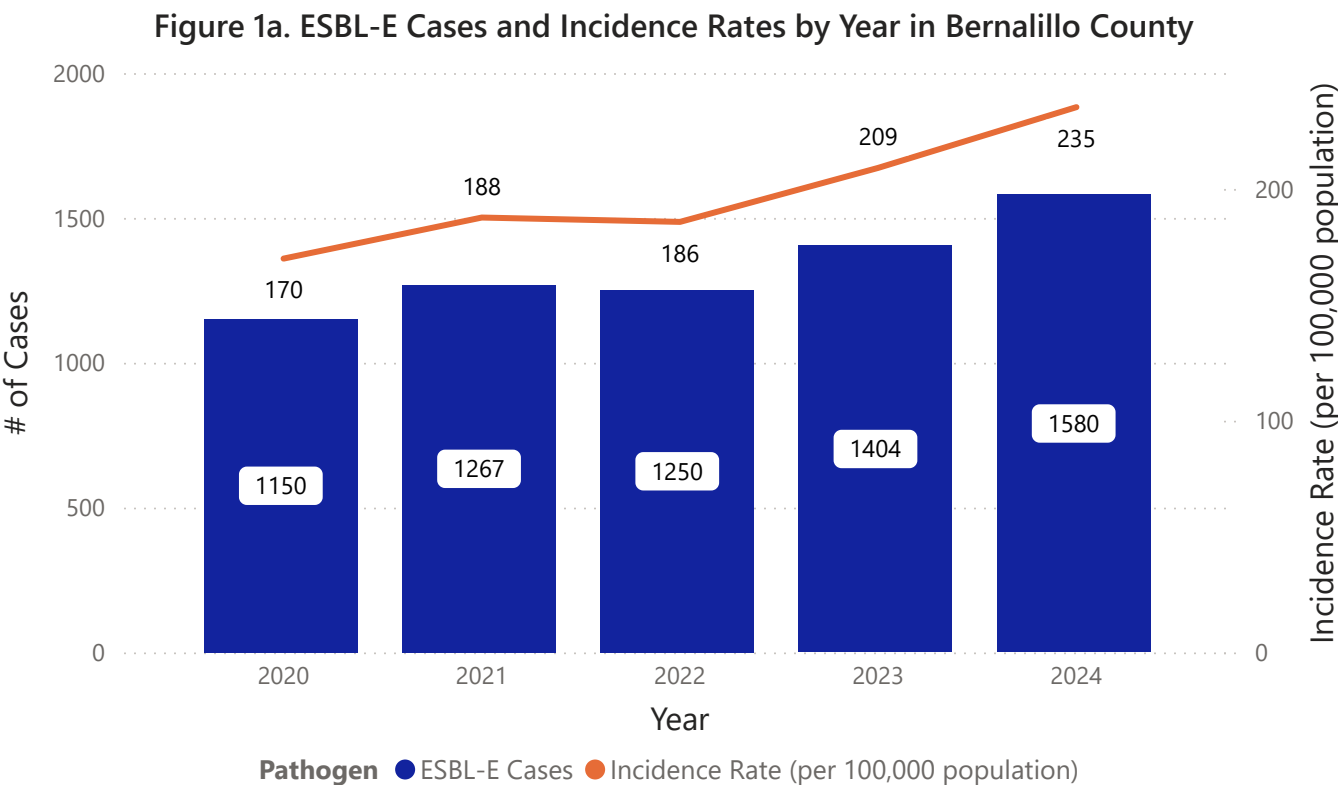
Cases of ESBL Infections by Year and Month

Figure 1a. ESBL-E Cases and Incidence Rates by Year in Bernalillo County

Figure 1a. ESBL-E Cases and Incidence Rates by Year in Bernalillo County

Pathogen ● ESBL-E Cases ● Incidence Rate (per 100,000 population)

Figure 1b. Case Counts by Month

Figure 1b. Case Counts by Month

Table 1. Case Counts by Month

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Total**
2020	125	113	94	73	76	103	102	95	92	85	101	91	**1150**
2021	103	88	104	116	135	98	107	113	116	98	93	96	**1267**
2022	93	91	104	109	106	110	114	106	98	112	107	100	**1250**
2023	124	119	116	104	116	113	113	122	123	132	124	98	**1404**
2024	130	105	130	129	135	117	121	153	140	167	133	120	**1580**

Case Counts & Incidence Rates
Overall and by Sex in Bernalillo County

Table 2. Case Counts by Sex and Year

Year	Female	Male
2020	912	238
2021	987	278
2022	966	283
2023	1085	319
2024	1202	378

*3 ESBL-E cases had unknown sex

Figure 2a. Proportion (%) of Cases by Sex

1496 (22.5%)
5152 (77.5%)

Sex
- Female
- Male
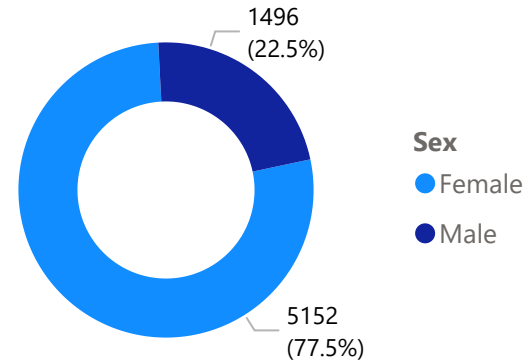
Figure 2b. Crude Incidence Rate by Sex and Year in Bernalillo County

Female: 265, 288, 282, 318, 352
Male: 71, 84, 86, 97, 115
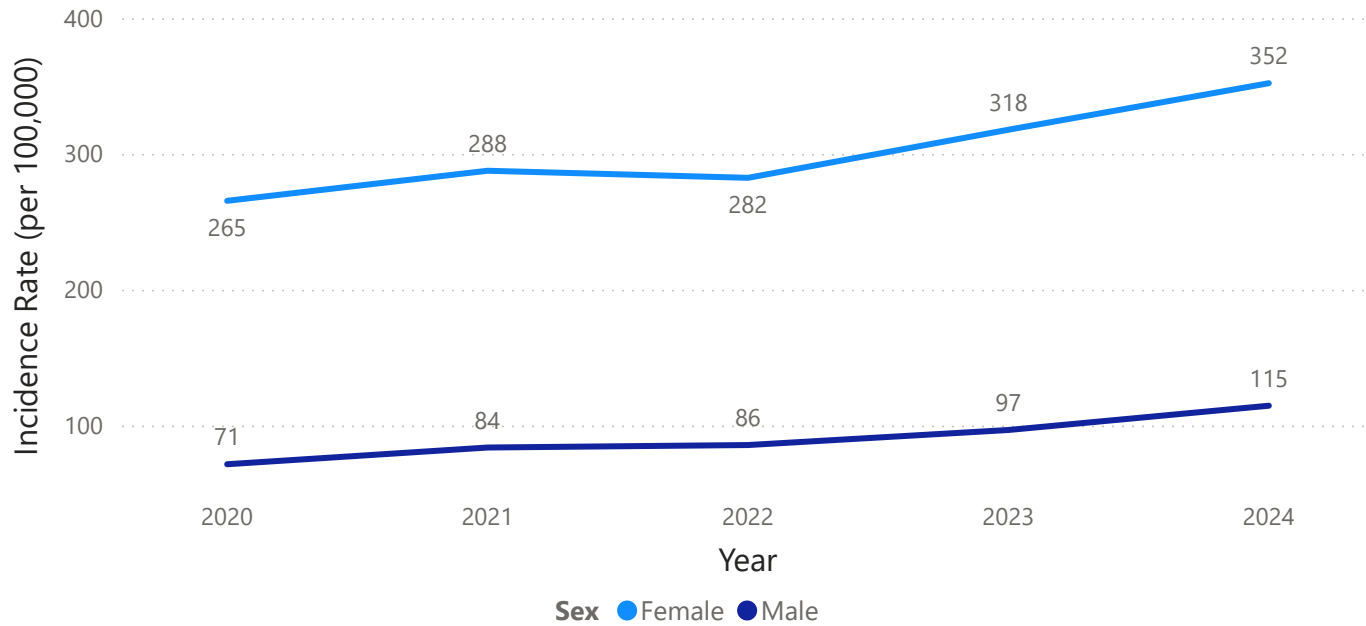
Sex ● Female ● Male

Figure 2c. Proportion of Incident Cases by Sex and Year

Year	Female	Male
2020	79%	21%
2021	78%	22%
2022	77%	23%
2023	77%	23%
2024	76%	24%

Sex
- Female
- Male
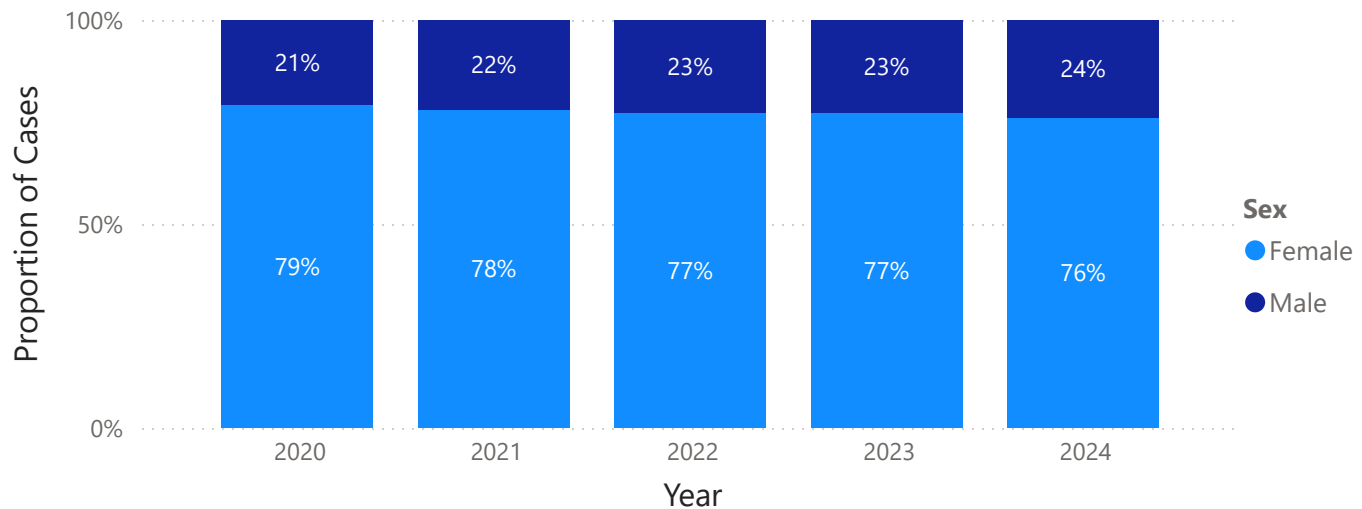
Case Counts & Incidence Rates
by Age Group in Bernalillo County

Table 3. Cases by Age Group

Sex	Female		Male		**Total**	
Age Group (years)	No. of Cases	Percent	No. of Cases	Percent	**No. of Cases**	**Percent**
0 to 14	126	1.9%	14	0.2%	**140**	**2.1%**
15 to 34	717	10.8%	46	0.7%	**763**	**11.5%**
35 to 54	1068	16.1%	266	4.0%	**1334**	**20.1%**
55 to 64	777	11.7%	348	5.2%	**1125**	**16.9%**
65 to 74	1113	16.7%	376	5.7%	**1489**	**22.4%**
75 to 84	887	13.3%	302	4.5%	**1189**	**17.9%**
85+	464	7.0%	144	2.2%	**608**	**9.1%**
Total	**5152**	**77.5%**	**1496**	**22.5%**	**6648**	**100.0%**

*3 ESBL-E cases with unknown sex

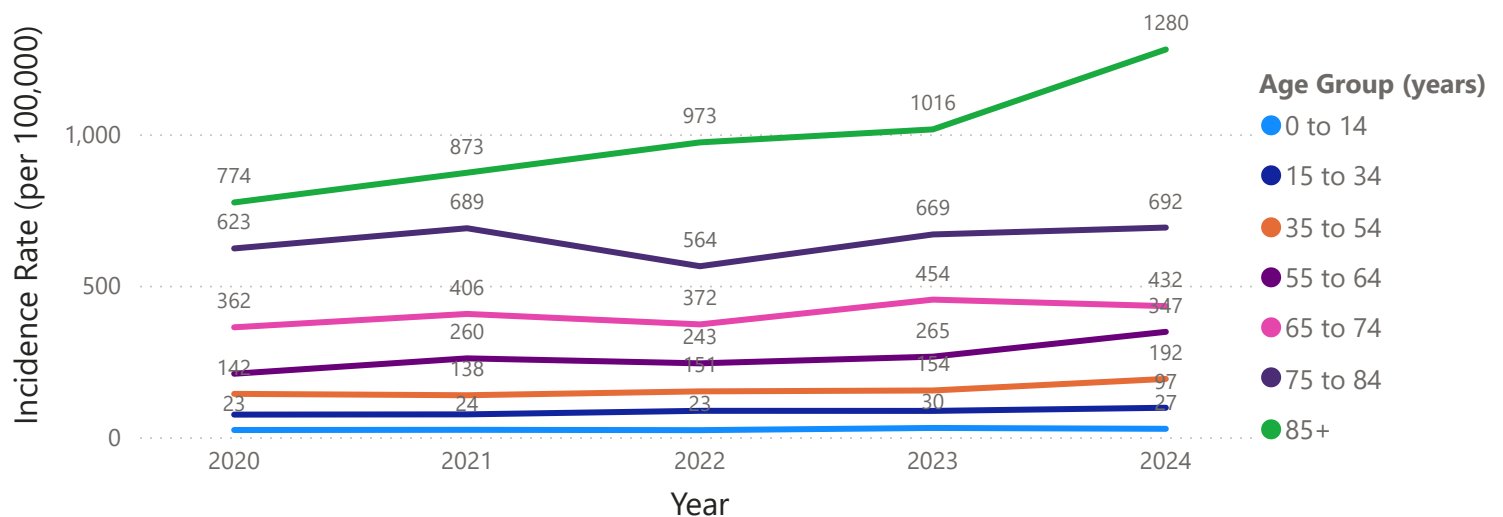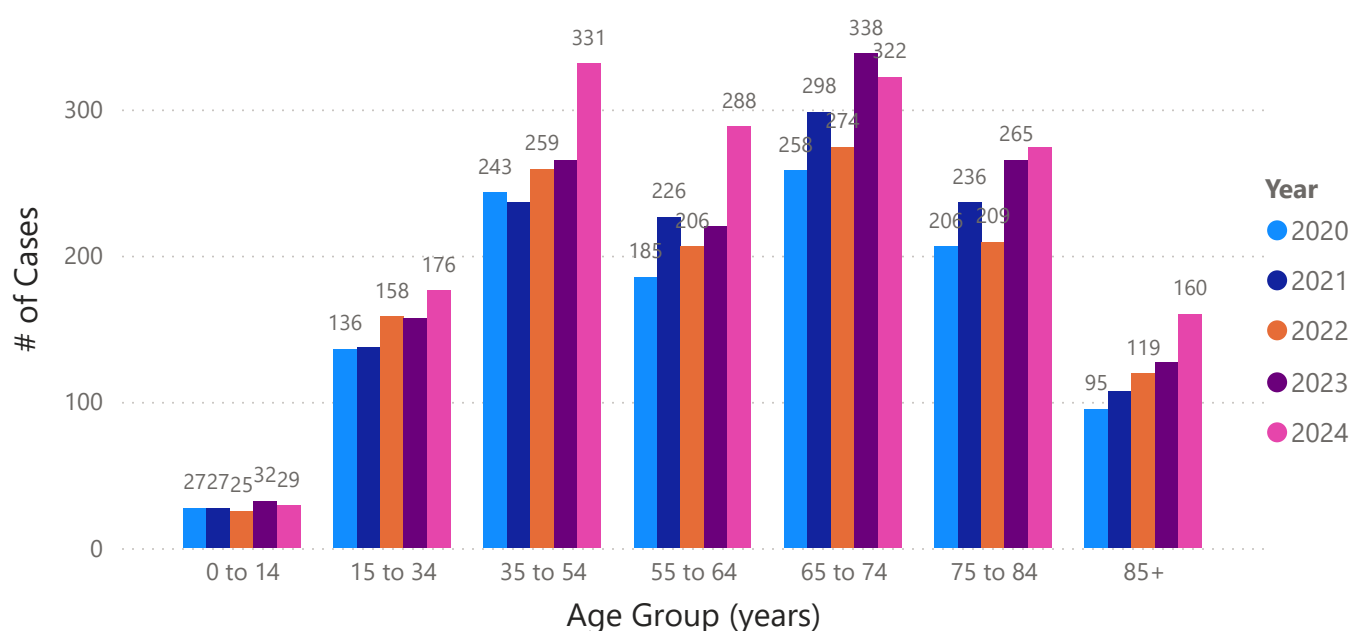**Figure 3a. Crude Incidence Rate by Age Group and Year in Bernalillo County**

Figure 3b. Case Counts by Age Group and Year in Bernalillo County

Case Counts & Incidence Rates by Race/Ethnicity in Bernalillo County

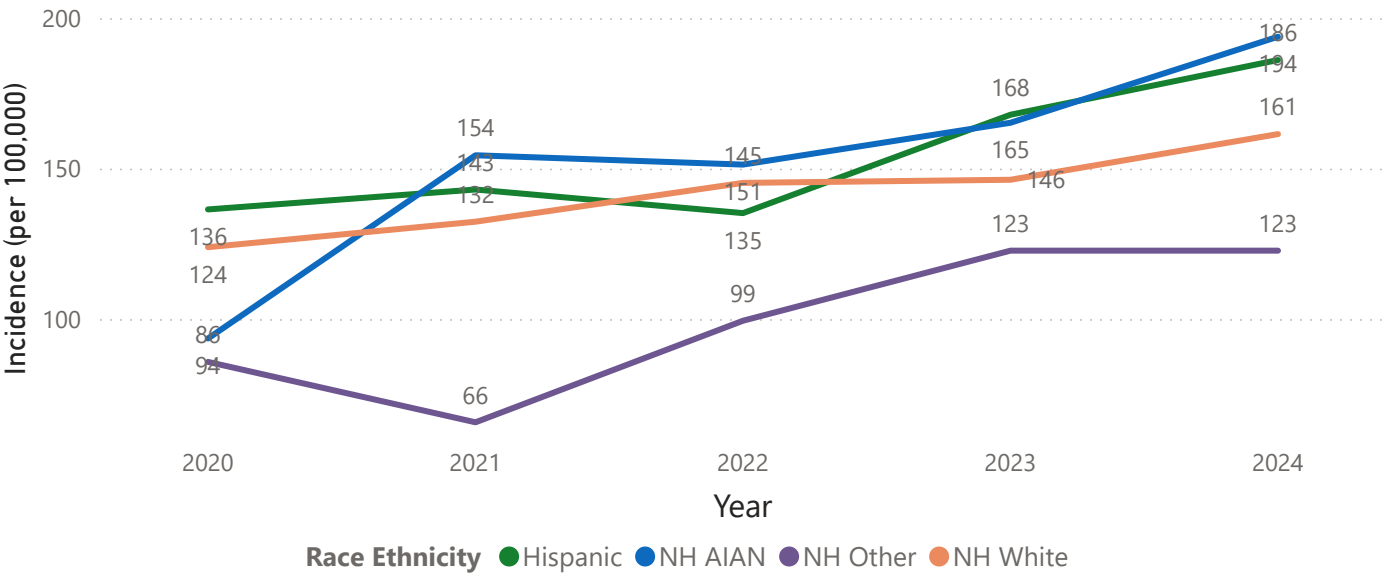### Figure 4a. Crude Incidence Rate by Race/Ethnicity and Year in Bernalillo County (N=6,651)

Table 4. Proportion of Abstracted Cases by Race/Ethnicity (N=5,175)

Race and Ethnicity	No. of Cases ▼	Percent
Hispanic, any race	2529	48.9%
Not known to be Hispanic - White	1834	35.4%
Not known to be Hispanic - Unknown race	323	6.2%
Not known to be Hispanic - Other or multiple race	260	5.0%
Not known to be Hispanic - American Indian or Alaskan Native (AIAN)	229	4.4%

Figure 4b. Abstracted Cases by Race/Ethnicity and Year (N=5,175)
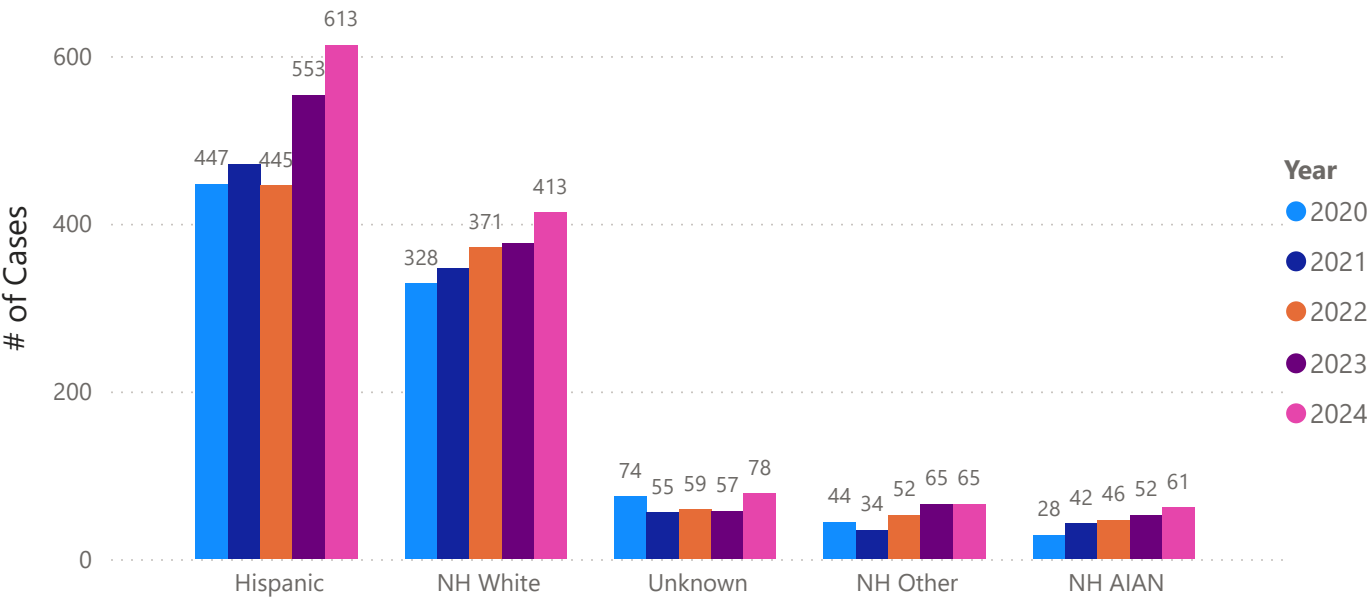
Specimen Source and Organisms Isolated

Table 5. Specimen Source by Organism

Specimen Source	Blood		Other Sterile Site		Urine	
Organism	No. of Cases	Percent	No. of Cases	Percent	No. of Cases	Percent
Escherichia coli	187	3.5%	42	0.8%	5077	95.7%
Klebsiella oxytoca	15	5.0%	8	2.7%	278	92.4%
Klebsiella pneumoniae	50	4.8%	11	1.1%	983	94.2%
Total	**252**	**3.8%**	**61**	**0.9%**	**6338**	**95.3%**

Figure 5a. Proportion (%) of ESBL-E Bacteria Isolated

Klebsiella pneumoniae 1044 (15.7%)
Klebsiella oxytoca 301 (4.5%)
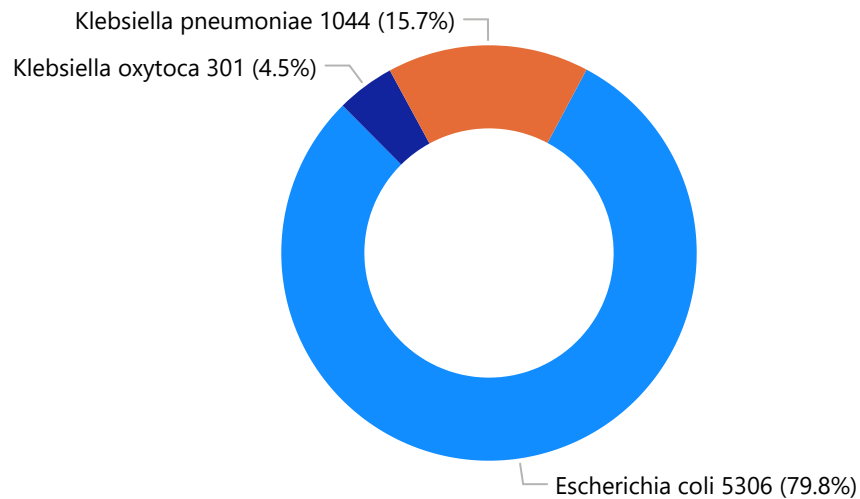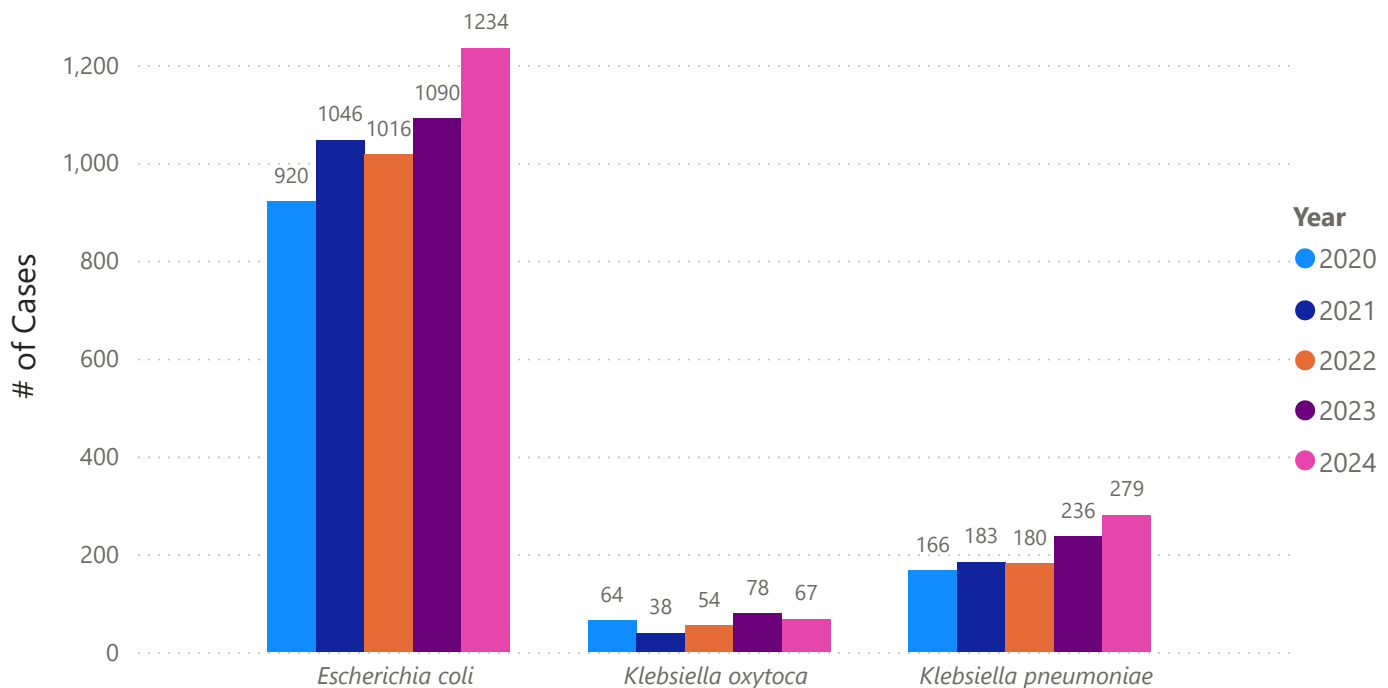Escherichia coli 5306 (79.8%)

Figure 5b. Organisms Isolated by Year

Location of Patient and Specimen Collection

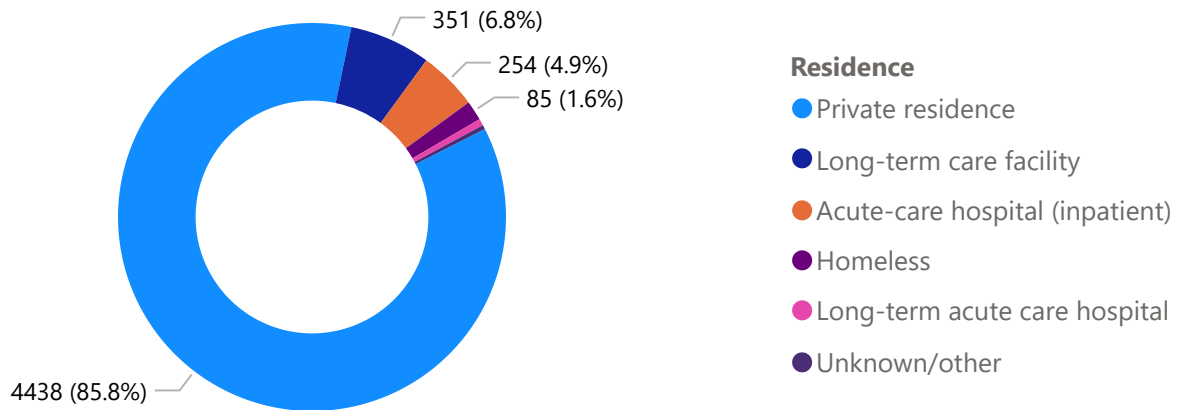## Figure 6a. Location of Patient on the 3rd Calendar Day Before Specimen Collection

351 (6.8%)
254 (4.9%)
85 (1.6%)
4438 (85.8%)

Residence
- Private residence
- Long-term care facility
- Acute-care hospital (inpatient)
- Homeless
- Long-term acute care hospital
- Unknown/other

Table 6. Location of Specimen Collection

Collection Location	No. of Cases	Percent
Outpatient setting or emergency department	4344	83.9%
Acute-care hospital	674	13.0%
Long-term care facility	122	2.4%
Long-term acute care hospital	26	0.5%
Unknown/other	9	0.2%
Total	**5175**	**100.0%**

Figure 6b. Location of Specimen Collection by Year
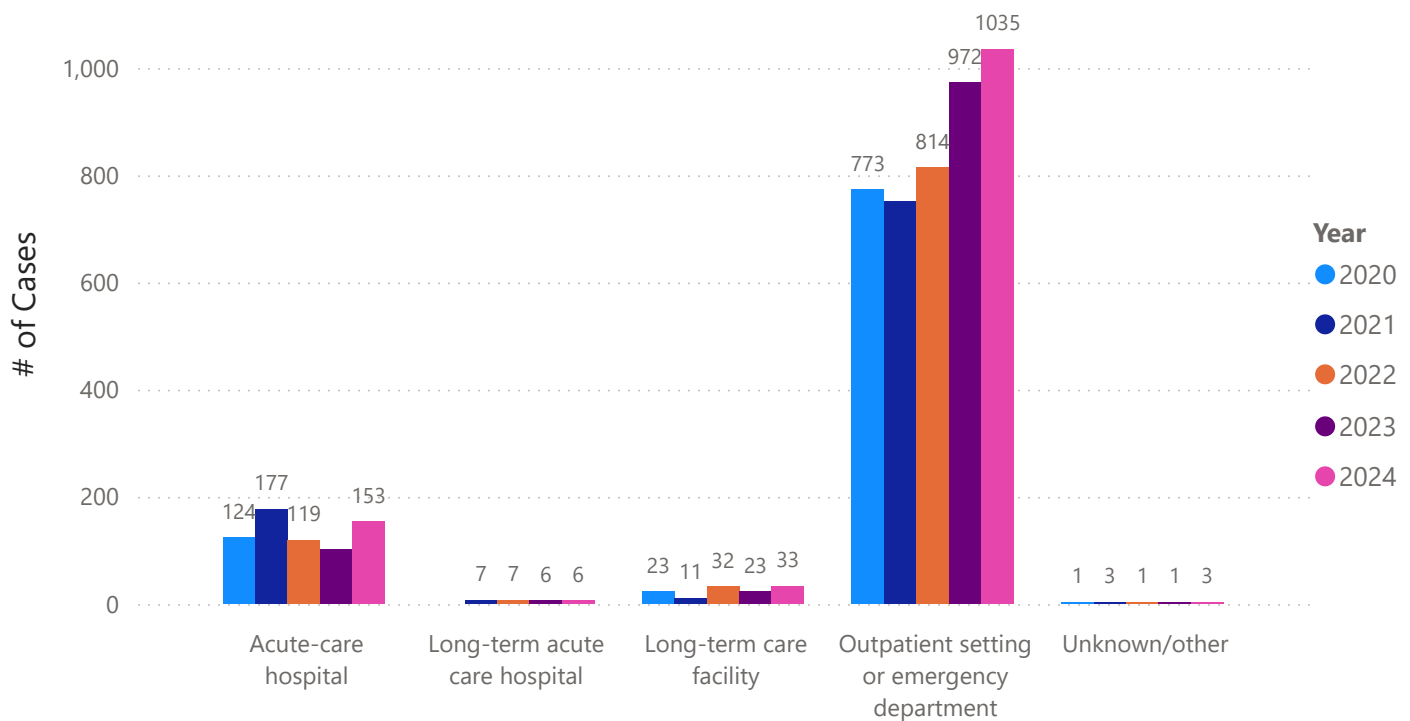
Infection Type Associated with ESBL-E

Table 7. Infection Types* (2020-2024)

Criteria	No. of Cases	Percent (%)
Abscess	26	0.5
Bacteremia	460	8.9
Pneumonia	56	1.1
Pyelonephritis	275	5.3
Septic shock	115	2.2
Urinary tract infection	3925	75.8
Sepsis**	98	8.0
Urosepsis**	30	2.4

*Cases could have more than one infection type..

**Data collection began in 2024

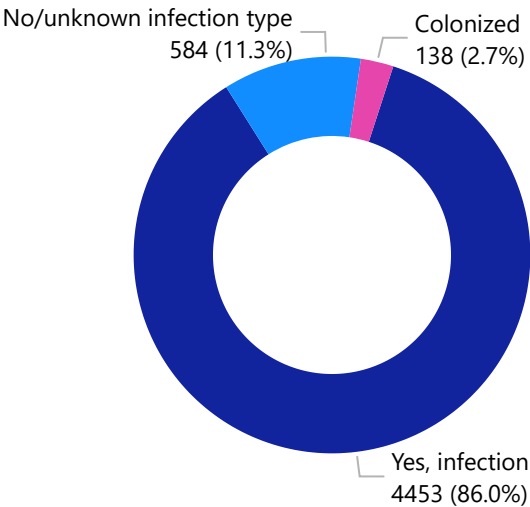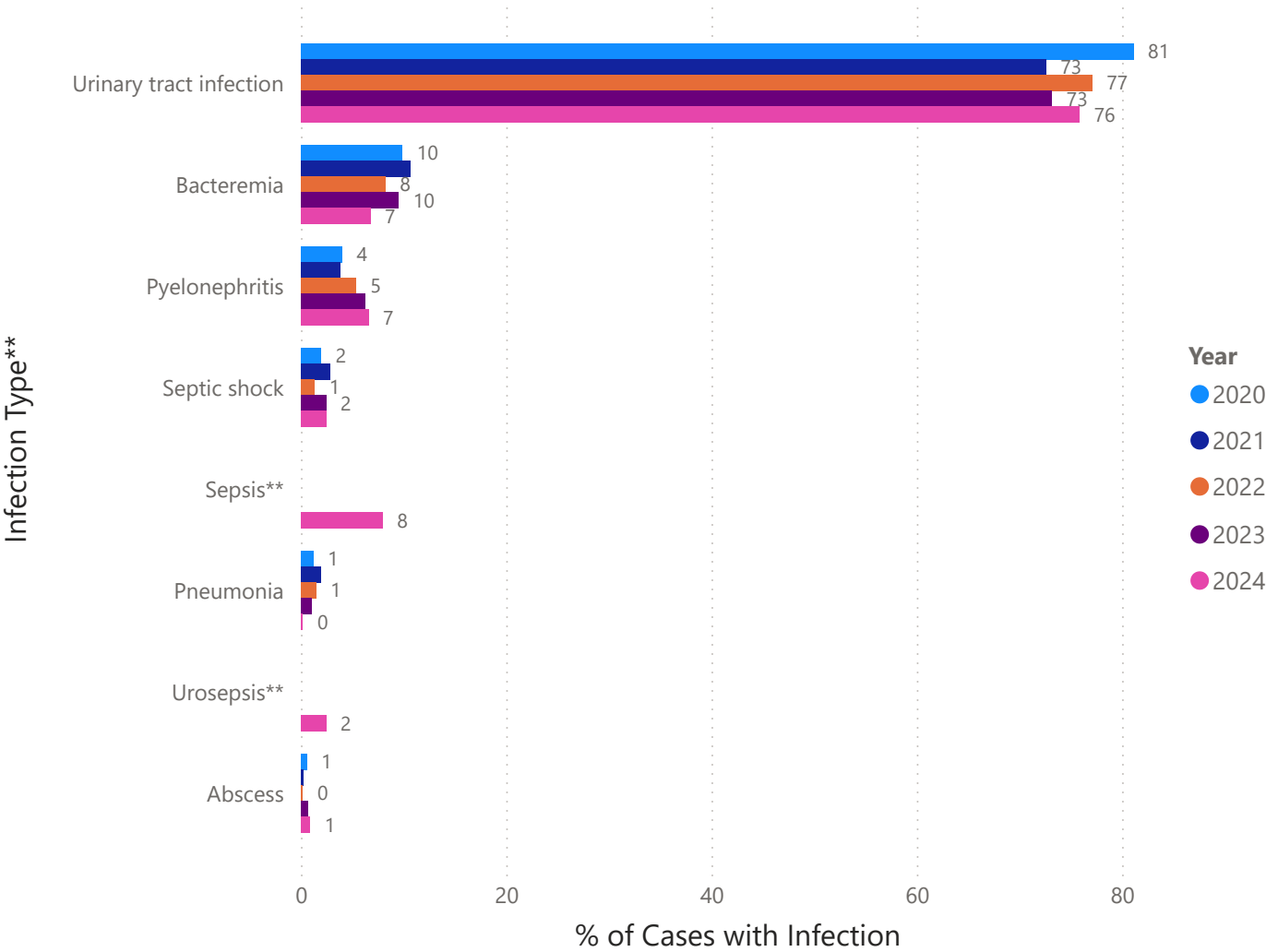## Figure 7a. Proportion (%) of Cases with Infection(s)

No/unknown infection type 584 (11.3%)
Colonized 138 (2.7%)
Yes, infection 4453 (86.0%)

Figure 7b. Proportion (%) of Cases with Select Infection Types, 2020-2024

Year
- 2020
- 2021
- 2022
- 2023
- 2024

Underlying Medical Conditions

Table 8. Proportion of Cases with Select Conditions

HAIC Program	Extended-spectrum Beta-lactamase Enterobacterales (ESBL-E)	
Condition	Cases	Percent (%)
Cardiovascular disease	974	18.8
Chronic lung disease	911	17.0
Chronic metabolic disorder	1362	26.3
Gastrointestinal disease	349	6.7
Liver disease	345	6.7
Malignancy	435	8.4
Neurologic condition	993	19.2
Other	1243	24.0
Plegias/paralysis	212	4.1
Renal disease	776	15.0
Skin condition	343	6.6
Urinary tract abnormality	931	18.0

*See Appendix for a list of conditions within underlying medical condition groups

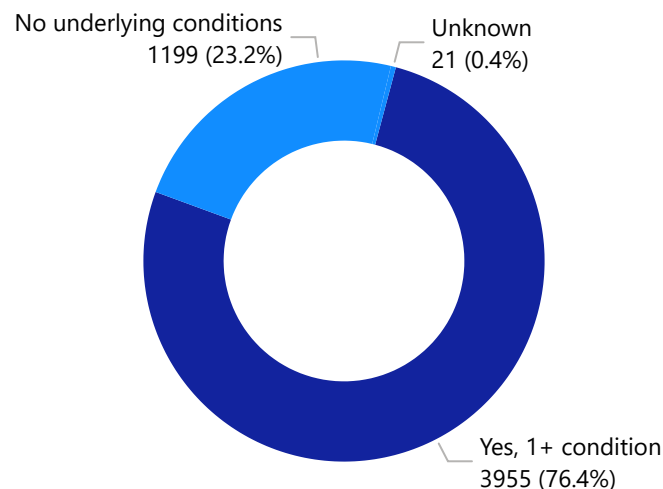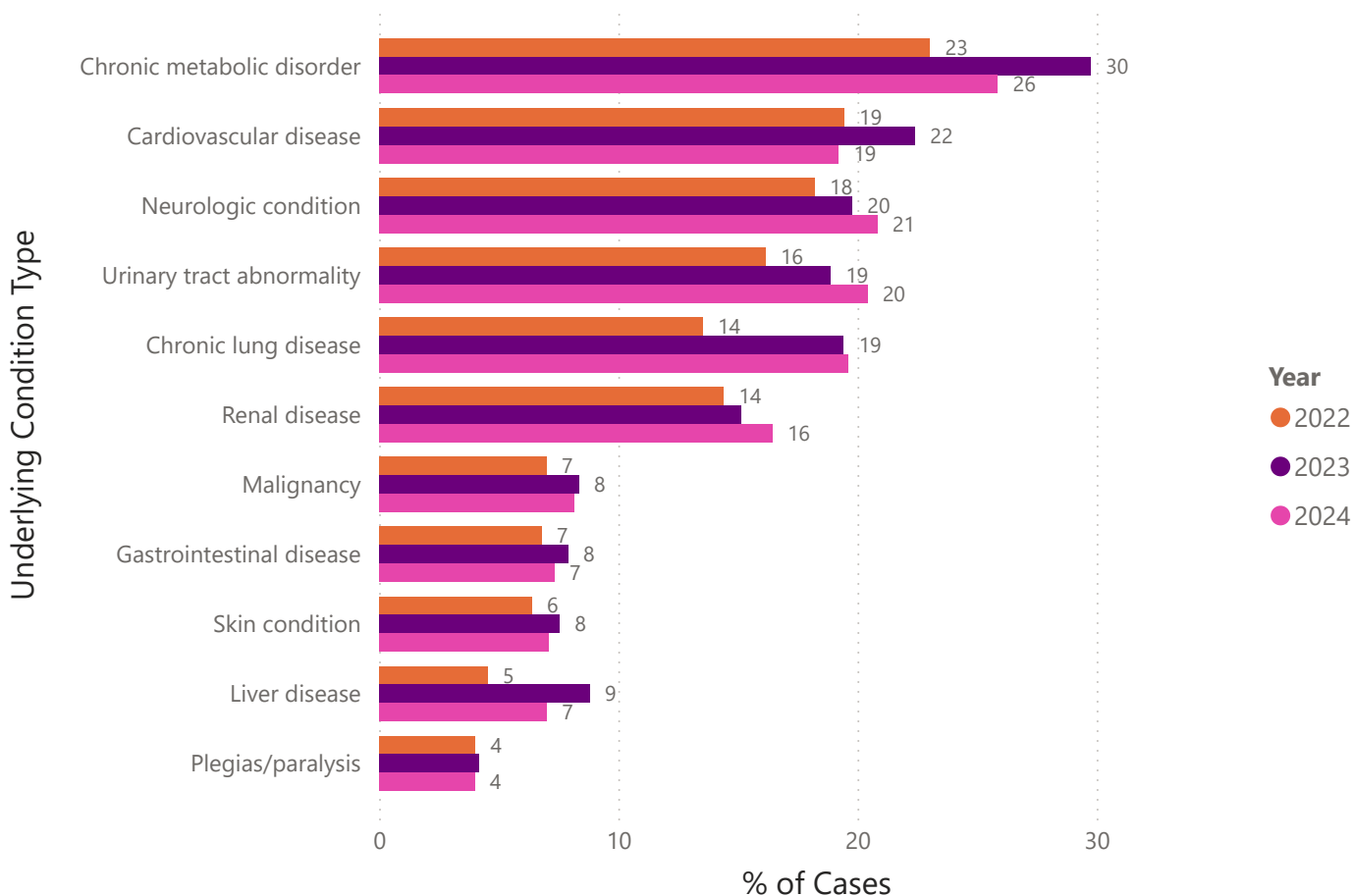## Figure 8a. Proportion (%) of Cases with Underlying Conditions

No underlying conditions 1199 (23.2%)
Unknown 21 (0.4%)
Yes, 1+ condition 3955 (76.4%)

Figure 8b. Proportion (%) of Cases with Underlying Conditions

Year
2022
2023
2024

Prior Healthcare Exposures and Risk Factors

Figure 9a. Proportion of Cases with Recurrent Urinary Tract Infections

Unknown 44 (0.9%)

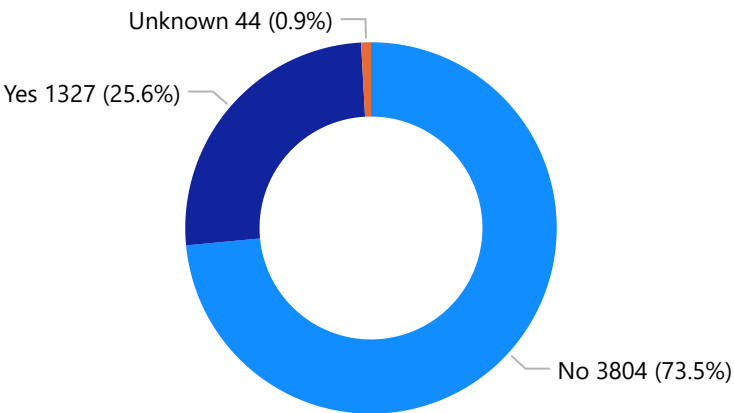Yes 1327 (25.6%)

No 3804 (73.5%)

Table 9. Selected Healthcare Exposures or Risk Factors

Exposure Type	No. of Cases	Percent (%)
No known risk factors	2209	42.7
Acute care hospitalization	1873	36.2
Long-term care facility (LTCF)	659	12.7
Specimen collected ≥3 days after hospital admission	229	4.4
International travel in the past year	95	1.8
Long-term acute care hospitalization (LTACH)	70	1.4

Figure 9b. Proportion (%) of Cases with Selected Health Care Exposures or RIsk Factors by Year
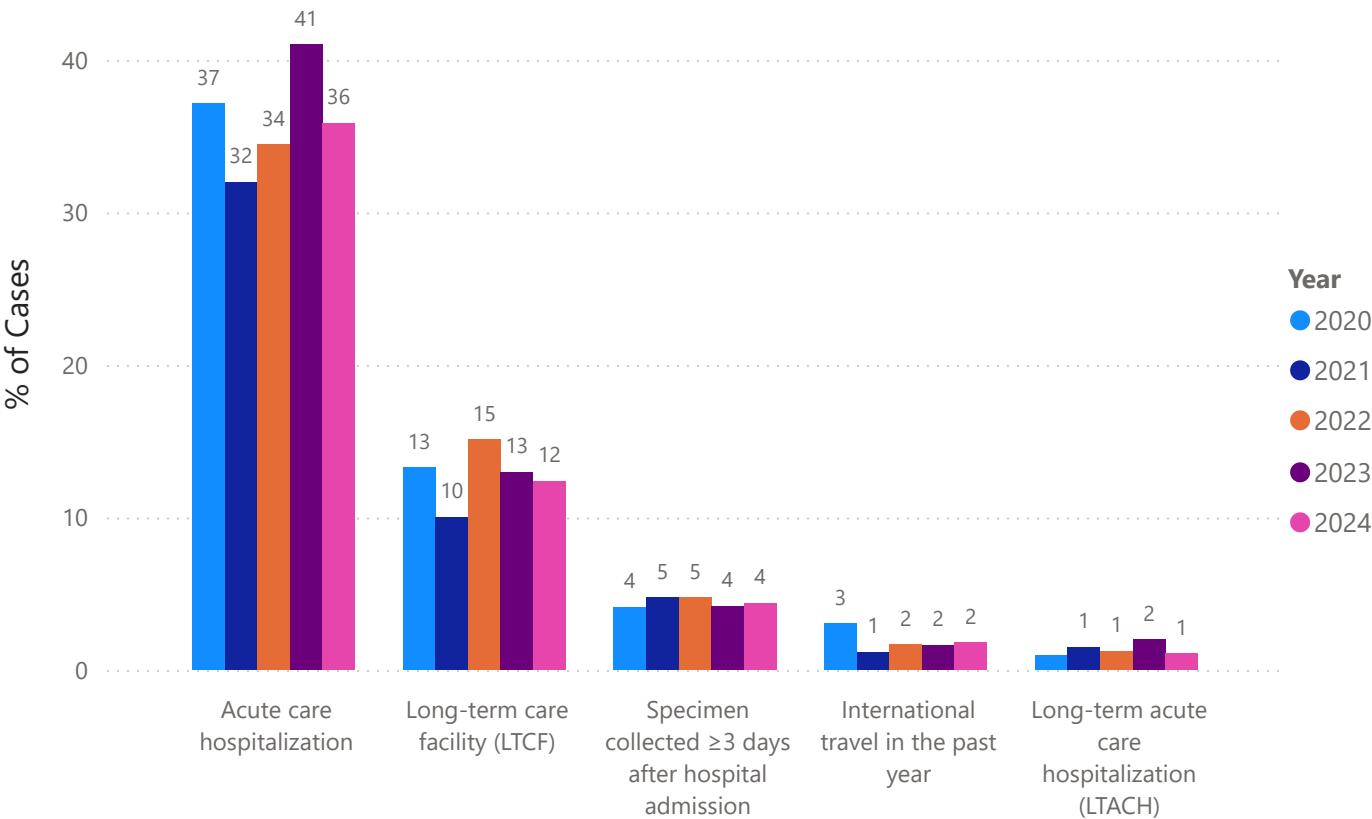
• Acute care hospitalizations, LTACH and LTCF stays were classified as an exposure if they occurred in the year prior to specimen collection

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Prior Healthcare Risk Factors - Devices and Procedures

**Table 10. Select Healthcare Device or Procedural Risk Factors**

Exposure Type	No. of Cases	Percent (%) ▼
Surgery	752	14.5
Catheter (urinary)*	712	13.8
Catheter (indwelling urinary)	572	11.1
Catheter (other)**	231	4.5
Catheter (central venous)***	186	3.6
Chronic dialysis	101	2.0

*Catheter (Urinary) include indwelling urethral, suprapubic, and condom catheters, etc.

**Catheter (Other) include: endotracheal, nasogastric, gastrostomy, tracheostomy, nephrostomy tubes, etc.

***Catheter (central venous) include non-tunneled and tunneled CVCs, implantable ports, and peripherally inserted central catheters (PICCs)

Figure 10. Proportion (%) of Cases with Select Healthcare Device or Procedural Risk Factors by Year
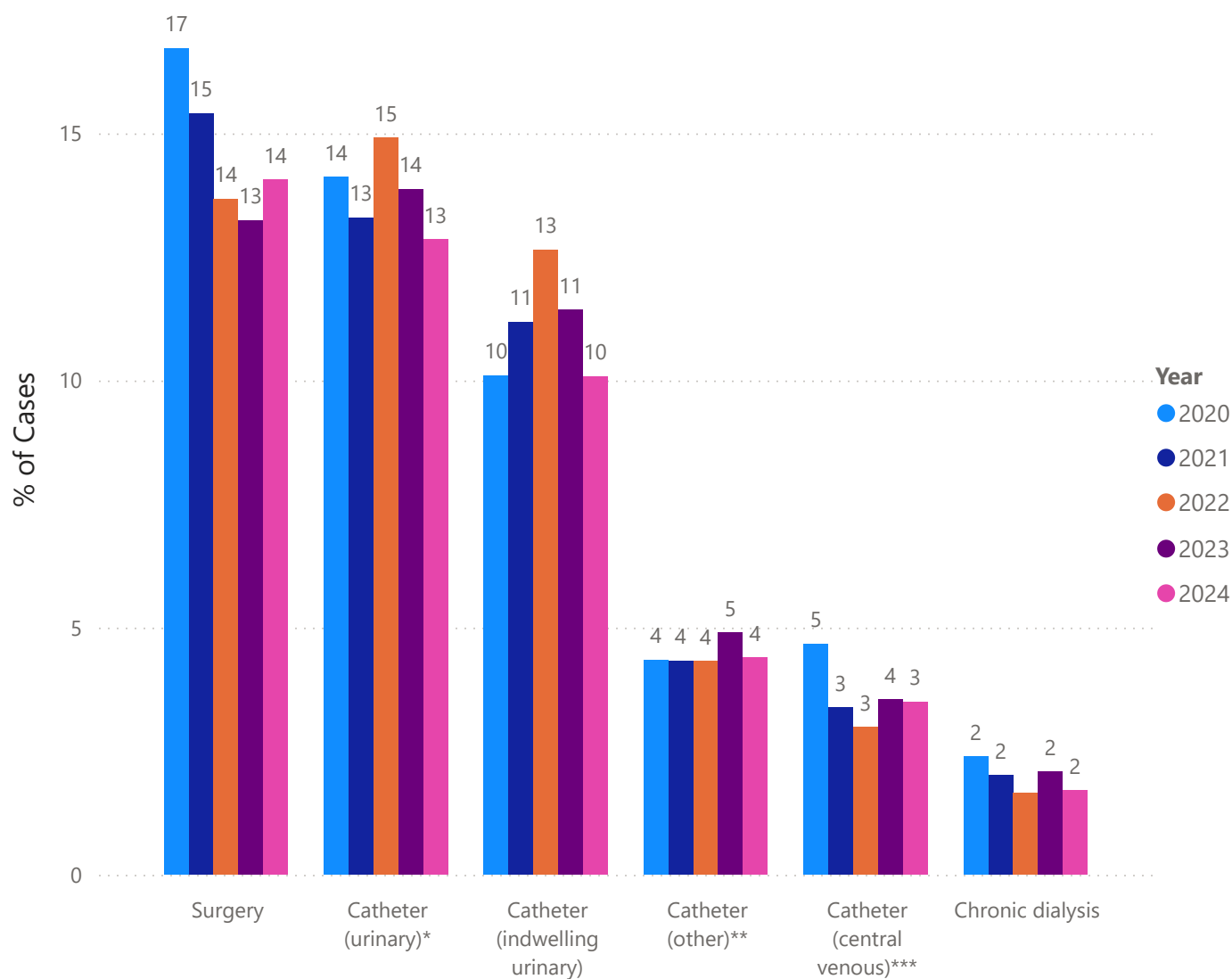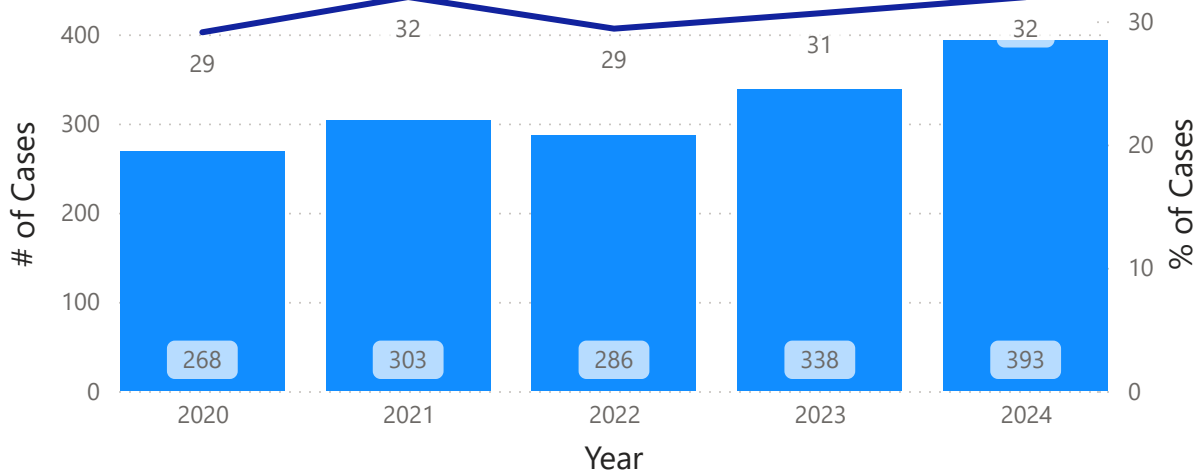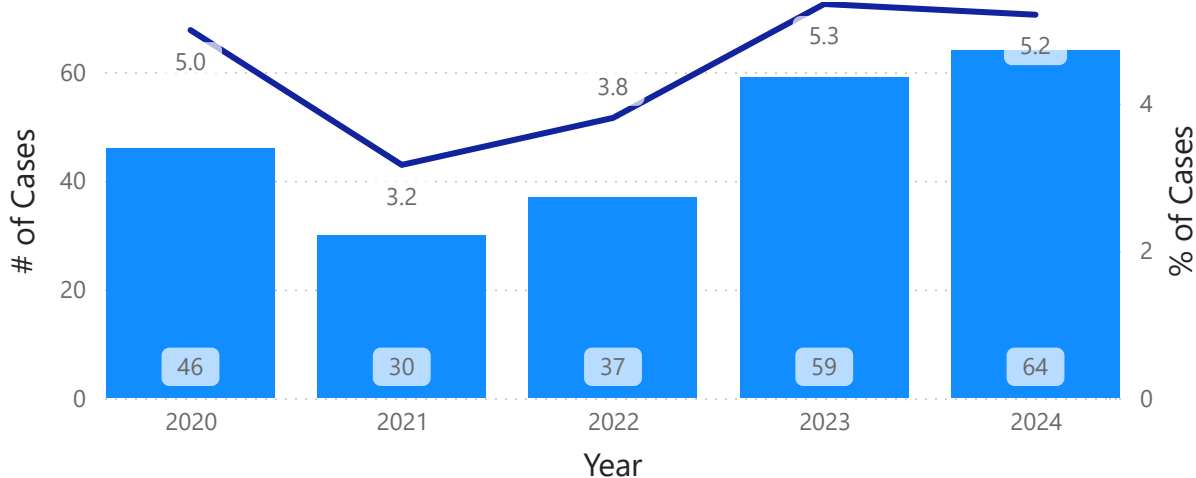
Patient Outcomes

Figure 11a. Cases and Proportion (%) Hospitalized on the Day or in the 29 Days After the Date of Specimen Collection by Year

1588

# of Patients Hospitalized

Year	2020	2021	2022	2023	2024
# of Cases	268	303	286	338	393
%	29	32	29	31	32

Figure 11b. Cases and Proportion (%) Admitted to ICU in the 6 Days After the Date of Specimen Collection by Year

236

# of Patients Admitted to ICU

Year	2020	2021	2022	2023	2024
# of Cases	46	30	37	59	64
%	5.0	3.2	3.8	5.3	5.2

Figure 11c. Cases and Proportion (%) Who Died During Hospitalization by Year

123

# of Patients Who Died During Hospitalization

Year	2020	2021	2022	2023	2024
# of Cases	22	23	22	31	25
%	2.4	2.4	2.3	2.8	2.0
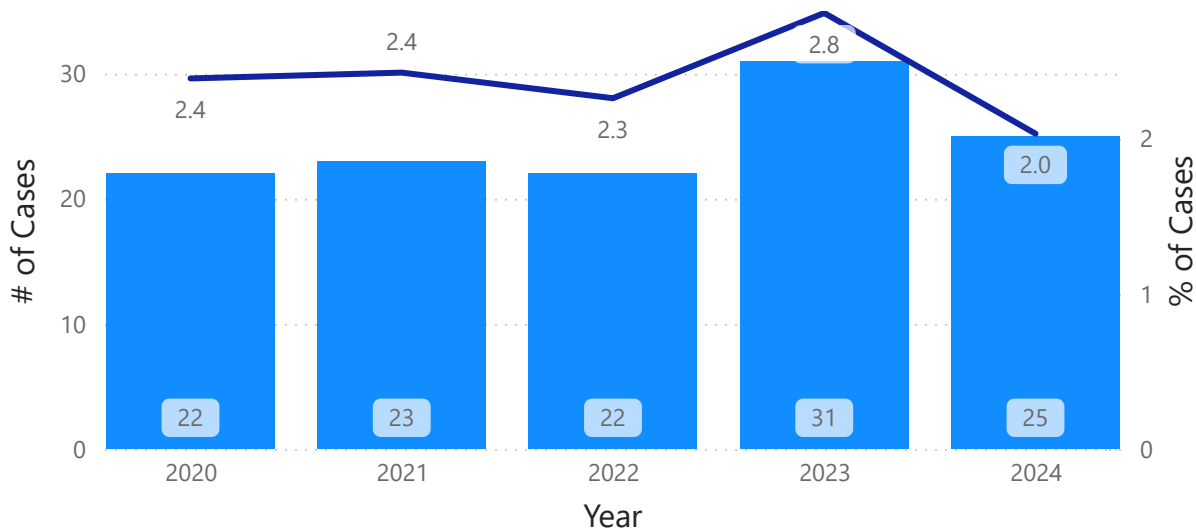
Hospitalized Patients - Outcomes and Discharge Locations

Figure 12a. Proportion of Hospitalized Patients Admitted to an Intensive Care Unit (ICU) in the 6 Days After Specimen Collection
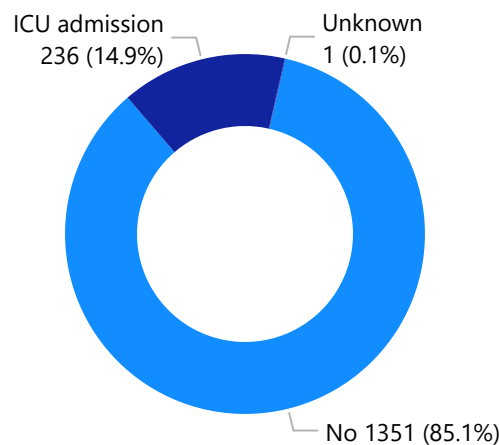

ICU admission
236 (14.9%)

Unknown
1 (0.1%)

No 1351 (85.1%)

Figure 12b. Proportion of Hospitalized Patients Who Died During Hospitalization

Died during hospitalization
116 (7.3%)

Survived
1472 (92.7%)
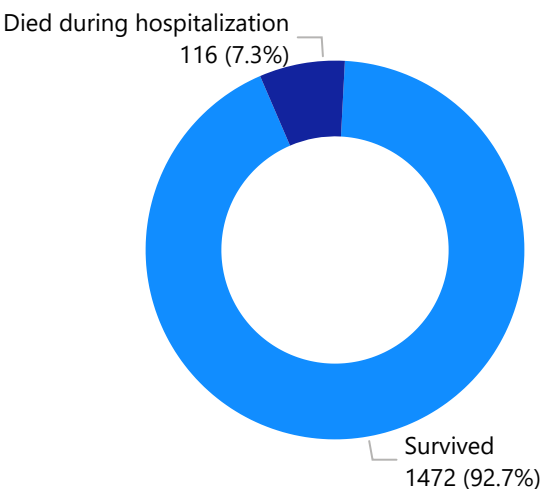
Table 12. Discharge Location Among Hospitalized Patients

Discharge Location	No. of Cases ▼	Percent
Private residence	978	66.4%
Long-term care facility	408	27.7%
Other (e.g. homeless/shelter, incarcerated)	45	3.1%
Long-term acute care hospital	30	2.0%
Unknown	11	0.7%
Total	**1472**	**100.0%**

Figure 12c. Patient Discharge Locations

15.0%
Acute-care hospital (inpatient)

67.3%
Private residence

13.4%
Long-term care facility

27.7%
Long-term care facility

66.4%
Private residence

7.7%
Died during hospitalization

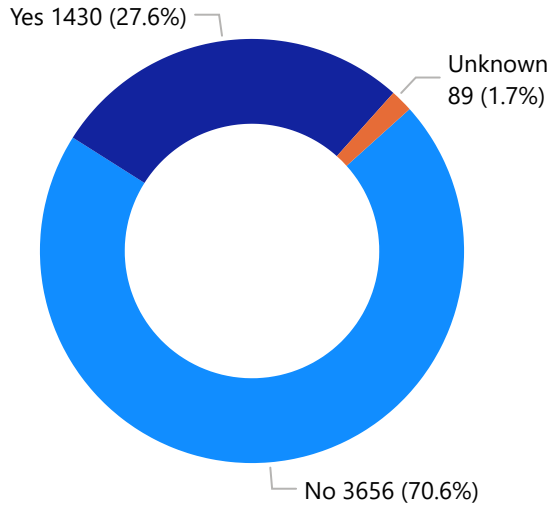Long-term acute care hospital

1.9%
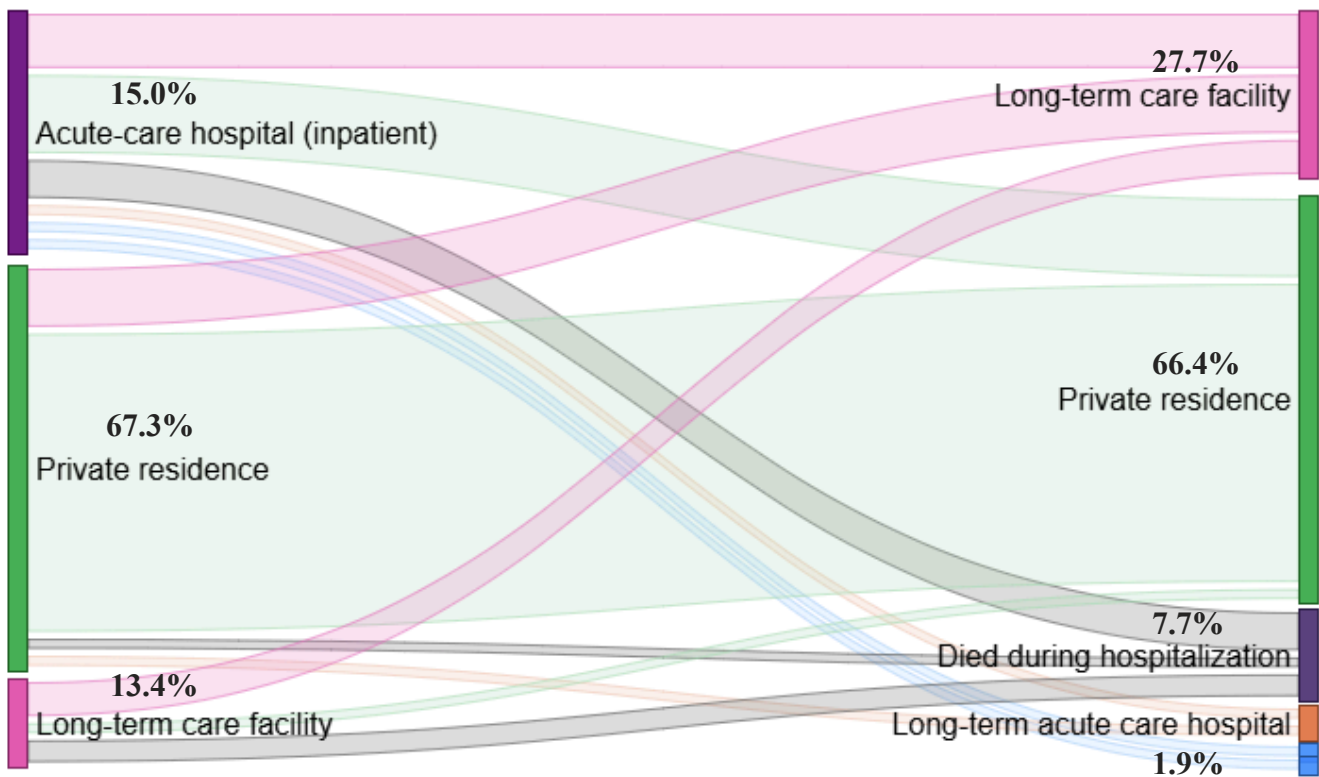
*~3% of patients hospitalized experienced homelessness (3.4%) or were in a long-term acute care hospital (<1%) [not shown]

Prior Antimicrobial Use

Figure 13a. Proportion of Patient With Antimicrobial Use in 30 Days Prior

Yes 1430 (27.6%)
Unknown 89 (1.7%)
No 3656 (70.6%)

Note:: the indication for antibiotic prescription is not collected.

Figure 13b. Proportion (%) of Patients with Select Antimicrobial Use in 30 Days Prior to Specimen Collection
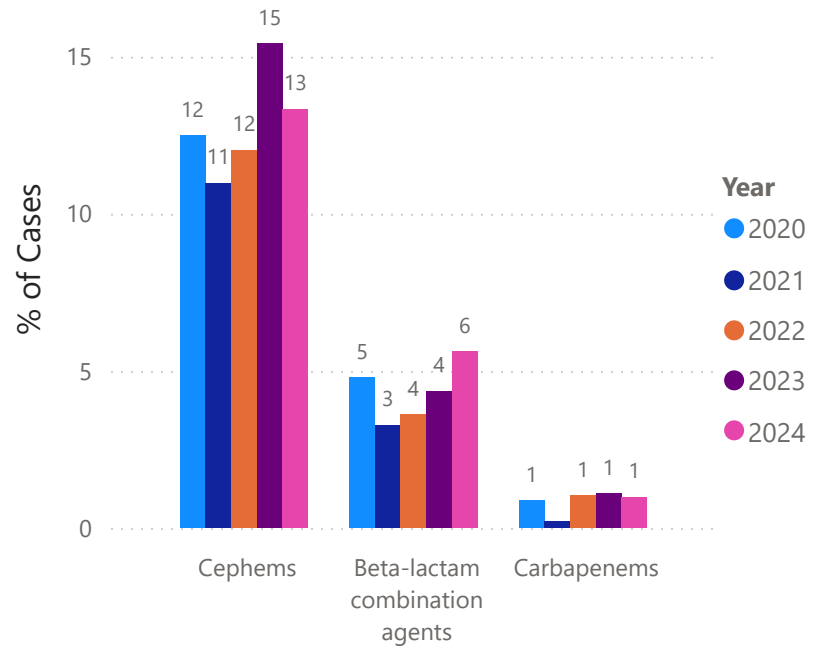

Table 13. Proportion (%) of Cases With Prior Antimicrobial Class Use by Year

Criteria	2020	2021	2022	2023	2024
Aminoglycosides	0.3	0.6	0.2	0.8	0.3
Ansamycins	1.0	0.6	0.4	0.7	0.8
Beta-lactam combination agents	4.8	3.3	3.6	4.4	5.6
Carbapenems	0.9	0.2	1.0	1.1	1.0
Cephems	12.5	11.0	12.0	15.4	13.3
Fluoroquinolones	5.5	3.4	5.0	4.6	2.7
Folate pathway antagonists	3.9	3.4	4.8	4.4	3.7
Fosfomycins	0.4	0.4	0.3	0.1	0.6
Glycopeptides	3.1	2.2	3.2	3.5	3.0
Lincosamides	1.1	0.3	0.4	0.6	0.3
Lipopeptides	0.1	0.1	0.2	0.3	0.2
Macrolides	2.1	0.5	1.1	1.5	1.6
Metronidazole	1.5	1.4	1.8	2.1	1.5
Monobactams	0.1	0.1	0.0	0.1	0.0
Nitrofurantoin	3.8	3.2	2.7	3.5	2.8
Oxazolidinones	0.2	0.0	0.1	0.4	0.3
Penicillins	2.6	1.5	2.8	2.4	2.1
Tetracyclines	2.4	0.8	1.8	2.9	2.4

Extended-spectrum β-lactamase-producing Enterobacterales (ESBL-E) Surveillance Report, Bernalillo County, 2020 to 2024

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Appendix. Underlying Medical Condition Groups

Condition (groups)	Condition
⊟ **Cardiovascular disease**	Congenital heart disease
	Congestive heart failure
	CVA/Stroke/TIA
	Myocardial infarction
	Peripheral vascular disease (PVD)
⊟ **Chronic lung disease**	Chronic pulmonary disease
	Cystic fibrosis
⊟ **Chronic metabolic disease**	Diabetes
⊟ **Gastrointestinal disease**	Diverticular disease
	Inflammatory bowel disease
	Peptic ulcer disease
	Short gut syndrome
⊟ **Immunocompromised condition**	HIV infection
	Primary Immunodeficiency
	Transplant, hematopoietic stem cell
	Transplant, solid organ
⊟ **Liver disease**	Chronic liver disease
	Hepatitis C
⊟ **Malignancy**	Malignancy, hematologic
	Malignancy, solid organ (metastatic)
	Malignancy, solid tumor (non-metastatic)
⊟ **Neurologic condition**	Cerebral palsy
	Chronic cognitive deficit
	Dementia
	Epilepsy/seizure/seizaure disorder
	Multiple sclerosis
	Neurologic, other
	Neuropathy
	Parkinson's Disease
⊟ **Other**	Connective tissue disorder
	Obesity
	Pregnant
⊟ **Plegias/paralysis**	Hemiplegia
	Paraplegia
	Quadriplegia
⊟ **Renal disease**	Chronic kidney disease
⊟ **Skin condition**	Burn
	Decubitus/pressure ulcer
	Other skin condition
	Other wound
	Surgical wound
⊟ **Urinary tract problems/abnormalities**	Urinary tract problems/abnormalities