

Enterobacteriaceae + *Non-Enterobacteriaceae*
Subgroups/Author(s)

Sampling Year Trait-Species Weight% Pr[95% CI]

2009–10

Saghir et al., 2009
Ullah et al., 2009
Khan et al., 2010
Jabeen et al., 2010

RE Model for Subgroup

(T² = 0.0000, df = 3, Q = 35.81,
p < .0001; H² = 11.9, I² = 91.6%)

2011–12

Ejaz et al., 2011
Perry et al., 2011
Hassan et al., 2011
Nazir et al., 2011
Tanvir et al., 2012

RE Model for Subgroup

(T² = 0.0008, df = 4, Q = 56.65,
p < .0001; H² = 14.2, I² = 92.9%)

2013–14

Kathryn M. Day et al., 2013
Saleem et al., 2013
Sultan et al., 2013
Hasan et al., 2013
Nahid et al., 2013
Habeeb et al., 2013
Jameel et al., 2014
Kalam et al., 2014
Habeeb et al., 2014

RE Model for Subgroup

(T² = 0.0055, df = 8, Q = 365.88,
p < .0001; H² = 45.7, I² = 97.8%)

2015–16

Riaz and Bashir, 2015
Sohail et al., 2015
Ashraf and Ahmed, 2015
Ikram et al., 2015
Pesesky et al., 2015
Malik and Ahmed, 2016
Javed et al., 2016
Ilyas et al., 2016
Hafeez et al., 2016
Salamat et al., 2016
Shabbir et al., 2016
Rahman et al., 2016
Ullah et al., 2016
Shah et al., 2016
Qadeer et al., 2016
Sattar et al., 2016

RE Model for Subgroup

(T² = 0.0020, df = 15, Q = 370.84,
p < .0001; H² = 24.7, I² = 96.0%)

2017–18

Abrar et al., 2017
Khurshid et al., 2017
Indhar et al., 2017
Khan et al., 2017
Shabbir et al., 2017
Ullah et al., 2017
Younas et al., 2018
Ain et al., 2018
Ansari et al., 2018
B. Jamil et al., 2018
Braun et al., 2018
Naz et al., 2018
Luxmi and Javed, 2018
J. Jamil et al., 2018
Humayun et al., 2018
Alizai et al., 2018

RE Model for Subgroup

(T² = 0.0091, df = 15, Q = 639.41,
p < .0001; H² = 42.6, I² = 97.7%)

2019–20

Baloch et al., 2019
Umair et al., 2019
Qamar et al., 2019a
Ahmed et al., 2019
M. Wajid et al., 2019
Muhammad Wajid et al., 2019
Sattar et al., 2019
Sana et al., 2019
Heinz et al., 2019
Bilal et al., 2019
Rasool et al., 2019
Farooq et al., 2019
S. Fatima et al., 2019
Younas et al., 2019
Ur Rahman et al., 2019
Masseron et al., 2019
Din et al., 2019
D'Souza et al., 2019
Aslam et al., 2020
Talpur et al., 2020

RE Model for Subgroup

(T² = 0.0203, df = 19, Q = 564.96,
p < .0001; H² = 29.7, I² = 96.6%)

RE Model for All Studies

(T² = 0.0010, df = 69, Q = 3678.83,
p < .0001; H² = 53.3, I² = 98.1%)

Test for Subgroup Differences

(T² = 0.0009, df = 5, Q_M = 1.16,
p = 0.3366; H² = 31.8, I² = 96.9%)

| | | | |
|------------|----------|-------|--------------------|
| 2006–07 | En | 0.36% | 0.19 [0.04, 0.35] |
| 2006–07 | KP | 1.10% | 0.13 [0.06, 0.20] |
| 2002–07 | ESBL–KP | 2.71% | 0.00 [0.00, 0.01] |
| 1990–06 | ESBL–NTS | 2.71% | 0.00 [–0.00, 0.00] |
| 2009–10 | En | 2.69% | 0.01 [0.00, 0.01] |
| 2009–10 | En | 1.38% | 0.18 [0.13, 0.24] |
| 2009–10 | ACBL–En | 2.04% | 0.01 [–0.02, 0.05] |
| 2008–09 | En | 2.15% | 0.09 [0.05, 0.12] |
| 2007–08 | EC | 2.62% | 0.01 [–0.00, 0.02] |
| 2011 | En | 1.33% | 0.19 [0.13, 0.25] |
| 2006–11 | KP | 0.90% | 0.20 [0.12, 0.29] |
| 2009–10 | En | 2.70% | 0.01 [0.01, 0.02] |
| 2010–11 | AB | 0.32% | 0.66 [0.49, 0.82] |
| – | GNR | 1.17% | 0.45 [0.38, 0.52] |
| 2005–10 | ESBL–EC | 2.35% | 0.01 [–0.01, 0.04] |
| 2011–12 | ESBL–EC | 2.53% | 0.01 [–0.01, 0.02] |
| 2012 | GNR | 1.06% | 0.42 [0.34, 0.50] |
| 2005, 9–10 | ESBL–EC | 2.44% | 0.01 [–0.01, 0.03] |
| 2007–8 | En | 2.64% | 0.02 [0.01, 0.03] |
| 2012–14 | En | 2.39% | 0.03 [0.01, 0.05] |
| 2010–14 | En | 2.69% | 0.08 [0.07, 0.08] |
| 2011–12 | SE | 2.64% | 0.00 [–0.01, 0.01] |
| 2012–13 | En | 0.50% | 0.24 [0.11, 0.36] |
| 2011–13 | SE | 2.06% | 0.04 [0.00, 0.07] |
| 2013–14 | En | 2.45% | 0.12 [0.10, 0.14] |
| 2015 | En | 0.48% | 0.24 [0.11, 0.37] |
| 2013–14 | En | 0.87% | 0.21 [0.12, 0.29] |
| 2011–12 | ACBL–GNB | 2.34% | 0.02 [–0.00, 0.05] |
| 2014 | En | 0.91% | 0.16 [0.07, 0.24] |
| 2013–14 | ESBL–EC | 1.54% | 0.03 [–0.03, 0.08] |
| 2012–15 | En | 2.52% | 0.07 [0.05, 0.08] |
| 2013–14 | GNB, GPB | 1.00% | 0.25 [0.17, 0.33] |
| 2015–16 | En | 0.88% | 0.29 [0.20, 0.38] |
| 2013 | En | 0.62% | 0.20 [0.09, 0.31] |
| 2013–15 | ESBL–En | 2.03% | 0.13 [0.09, 0.16] |
| 2016–17 | AB | 0.32% | 0.98 [0.81, 1.14] |
| 2014 | Asp | 0.25% | 0.95 [0.76, 1.14] |
| 2014 | En | 2.36% | 0.01 [–0.02, 0.03] |
| 2014–15 | En | 2.54% | 0.03 [0.01, 0.04] |
| – | PA | 1.00% | 0.17 [0.09, 0.25] |
| 2014–15 | ACBL–KP | 0.58% | 0.44 [0.33, 0.56] |
| 2015–17 | En | 1.21% | 0.45 [0.38, 0.52] |
| 2015–16 | En | 2.61% | 0.04 [0.03, 0.05] |
| 2014 | En | 1.46% | 0.39 [0.34, 0.45] |
| 2016 | GNB | 1.92% | 0.17 [0.13, 0.21] |
| 2016–17 | GNR | 2.56% | 0.10 [0.08, 0.11] |
| 2015–16 | ESBL–En | 1.66% | 0.11 [0.06, 0.16] |
| 2016–17 | EC | 0.48% | 0.33 [0.20, 0.46] |
| 2015 | KP | 1.14% | 0.14 [0.06, 0.21] |
| 2014–17 | En | 2.32% | 0.09 [0.07, 0.12] |
| 2018 | EC | 0.20% | 0.15 [–0.06, 0.37] |
| 2016 | ESBL–EC | 0.14% | 0.52 [0.26, 0.78] |
| 2017–18 | EC | 0.24% | 1.00 [0.80, 1.20] |
| 2018 | EC | 1.61% | 0.07 [0.02, 0.12] |
| 2015–16 | SE | 0.17% | 0.78 [0.54, 1.01] |
| – | SE | 0.27% | 0.78 [0.60, 0.96] |
| 2017–18 | En | 2.40% | 0.03 [0.01, 0.06] |
| 2016–18 | En | 0.25% | 0.45 [0.26, 0.64] |
| 2010–12 | En | 1.64% | 0.11 [0.06, 0.16] |
| – | PV | 0.33% | 0.12 [–0.05, 0.28] |
| 2016–17 | GNR | 0.48% | 0.68 [0.55, 0.81] |
| 2019 | MDR–EC | 0.26% | 0.86 [0.68, 1.05] |
| 2019 | GNR–ESBL | 1.88% | 0.04 [–0.00, 0.08] |
| 2017–18 | MDR–EC | 0.23% | 0.29 [0.09, 0.48] |
| – | ESBL–EC | 0.97% | 0.06 [–0.02, 0.14] |
| 2017–18 | GNR | 0.26% | 0.58 [0.40, 0.77] |
| 2018 | GNB | 2.39% | 0.03 [0.00, 0.05] |
| – | AB | 0.19% | 0.92 [0.70, 1.14] |
| 2014–18 | KP | 2.48% | 0.17 [0.15, 0.19] |
| 2019 | KP | 0.08% | 0.50 [0.15, 0.85] |

–0.5 0.0 0.5 1.0 1.5

Incidence Rate