|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Study**  **Table, Supplemental Digital Content 6. Resistance rates of bacteria to antibiotics** | **Year of conduction** | ***S. pneumoniae*** | | | ***H. influenzae*** | | | ***S. aureus*** | | | ***P. aeruginosa*** | | | ***S. pyogenes*** | | | ***M. catharralis*** | | |
|  |  | n | *%* | 95% CI | n | *%* | 95% CI | n | % | 95% CI | n | % | 95% CI | n | % | 95% CI | n | % | 95% CI |
| **Resistance to penicillin** | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ding 2015 | 2011-2013 | 11 / 108 | 10.2 | 5.5-17.0 | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ |
| Marchisio 2013-3 | 2008-2011 | 1 / 50 | 2.0 | 1.0-9.5 | 0 / 143 | 0.0 | 0.0-2.1 | 5 / 17 | 29.4 | 11.7-53.7 | ­ | ­ | ­ | 1 / 49 | 2.0 | 0.1-9.7 | 0 / 4 | 0.0 | 0.0-52.7 |
| Marchisio 2013-2 | 2005-2007 | 0 / 19 | 0.0 | 0-14.6 | 0 / 35 | 0.0 | 0.0-8.2 | 1 / 4 | 25.0 | 1.3-75.8 | ­ | ­ | ­ | 0 / 14 | 0.0 | 0.0-19.3 | ­ | ­ | ­ |
| Marchisio 2013-1 | 2001-2004 | 0 / 22 | 0.0 | 0-12.7 | 1 / 42 | 2.4 | 0.1-11.2 | 1 / 12 | 8.3 | 0.4-34.7 | ­ | ­ | ­ | 0 / 20 | 0.0 | 0.0-13.9 | 0 / 1 | 0.0 | 0.0-79.3 |
| Grevers 2012 | 2008-2010 | 1 / 10 | 10.0 | 0.5-40.3 | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ |
| Stamboulidis 2011-2 | 2005-2008 | 44 / 329 | 13.4 | 10.0-17.4 | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ |
| Stamboulidis 2011-1 | 2000-2008 | 28 / 647 | 4.3 | 3.0-6.1 | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ |
| Brook 2009 | 2001-2006 | 1 / 22 | 4.5 | 0.2-20.4 | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ |
| **Resistance to amoxicillin** | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ding 2015 | 2011-2013 | 45 / 108 | 41.7 | 32.6-51.1 | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ |
| Grevers 2012 | 2008-2010 | 0 / 10 | 0.0 | 0.0-25.9 | 2 / 21 | 9.5 | 1.6-28.1 | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ |
| Junejo 2011 | 2007-2009 | 5 / 63 | 7.9 | 3.0-16.7 | 7 / 22 | 31.8 | 56.6-91.2 | 63 / 114 | 55.3 | 46.1-64.2 | 7 / 7 | 100.0 | 65.2-100.0 | 2 / 19 | 10.5 | 1.8-30.6 | ­ | ­ | ­ |
| **Resistance to trimethoprim/sulfamethoxazole** | | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ding 2015 | 2011-2013 | 89 / 108 | 82.4 | 74.4-88.7 | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ |
| Marchisio 2013-3 | 2008- 2011 | 3 / 50 | 6.0 | 1.5-15.5 | 11 / 143 | 7.7 | 4.1-13.0 | 1 / 17 | 5.9 | 0.3-25.8 | ­ | ­ | ­ | 3 / 49 | 6.1 | 1.6-15.8 | 0 / 4 | 0.0 | 0.0-52.7 |
| Marchisio 2013-2 | 2005- 2007 | 0 / 19 | 0.0 | 0.0-14.6 | 0 / 35 | 0.0 | 0.0-8.2 | 0 / 4 | 0.0 | 0.0-52.7 | ­ | ­ | ­ | 0 / 14 | 0.0 | 0.0-19.3 | ­ | ­ | ­ |
| Marchisio 2013-1 | 2001- 2004 | 6 /22 | 27.3 | 11.9-48.3 | 3 / 42 | 7.1 | 1.8-18.2 | 0 / 12 | 0.0 | 0.0-22.1 | ­ | ­ | ­ | 2 / 20 | 10.0 | 1.7-29.3 | 0 / 1 | 0.0 | 0.0-79.3 |
| Grevers 2012 | 2008-2010 | 0 / 10 | 0.0 | 0.0-25.9 | 7 / 21 | 33.3 | 15.9-55.1 | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ |
| **Resistance to erythromycin** | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ding 2015 | 2011-2013 | 107 / 108 | 99.1 | 95.6-100.0 | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ |
| Setchanova 2013 | 1994-2011 | 60 / 128 | 46.9 | 38.3-55.5 | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ |
| Marchisio 2013-3 | 2008- 2011 | 14 / 50 | 28.0 | 16.9-41.6 | 3 / 143 | 2.1 | 0.5-5.6 | 5 / 17 | 29.4 | 11.7-53.7 | ­ | ­ | ­ | 7 / 49 | 14.3 | 6.5-26.2 | 0 / 4 | 0.0 | 0.0-52.7 |
| Marchisio 2013-2 | 2005- 2007 | 2 / 19 | 10.5 | 1.8-30.6 | 0 / 35 | 0.0 | 0.0-8.2 | 1 / 4 | 25.0 | 1.3-75.8 | ­ | ­ | ­ | 1 / 14 | 7.1 | 0.4-30.5 | ­ | ­ |  |
| Marchisio 2013-1 | 2001- 2004 | 5 / 22 | 22.7 | 8.8-43.4 | 4 / 42 | 9.5 | 3.1-21.4 | 1 / 12 | 8.3 | 0.4-34.7 | ­ | ­ | ­ | 4 / 20 | 20.0 | 6.7-41.5 | 0 / 1 | 0.0 | 0.0-79.3 |
| Stamboulidis 2011-2 | 2005- 2008 | 115 / 329 | 35.0 | 29.9-40.2 | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ |
| Stamboulidis 2011-1 | 2000-2003 | 268 / 614 | 43.6 | 39.8-47.6 | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ |
| **Resistance to cephalosporin** | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ding 2015 | 2011-2013 | 37 / 108 | 34.3 | 25.8-43.6 | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ |
| Marchisio 2013-3 | 2008- 2011 | 0 / 50 | 0.0 | 0.0-5.8 | 2 / 143 | 1.4 | 0.2-4.5 | 3 / 17 | 17.6 | 4.7-40.9 | ­ | ­ | ­ | 0 / 49 | 0.0 | 0.0-5.9 | 0 / 4 | 0.0 | 0.0-52.7 |
| Marchisio 2013-2 | 2005- 2007 | 0 / 19 | 0.0 | 0.0-14.6 | 0 / 35 | 0.0 | 0.0-8.2 | 1 / 4 | 25.0 | 1.3-75.8 | ­ | ­ | ­ | 0 / 14 | 0.0 | 0.0-19.3 | ­ | ­ | ­ |
| Marchisio 2013-1 | 2001- 2004 | 0 / 22 | 0.0 | 0.0-12.7 | 0 / 42 | 0.0 | 0.0-6.9 | 1 / 12 | 8.3 | 0.4-34.7 | ­ | ­ | ­ | 0 / 20 | 0.0 | 0.0-13.9 | 0 / 1 | 0.0 | 0.0-79.3 |
| Chen 2013 | 2011-2012 | 2 / 32 | 6.3 | 1.1-19.1 | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ |
| Junejo 2011 | 2007-2009 | 7 / 63 | 11.1 | 5.0-20.7 | 1 / 22 | 4.5 | 0.2-20.4 | 60 / 114 | 52.6 | 43.5-61.7 | 2 / 7 | 28.6 | 5.1-67.0 | 3 / 19 | 15.8 | 4.2-37.2 | ­ | ­ | ­ |
| Stamboulidis 2011-3 | 2005- 2008 | 8 / 329 | 2.4 | 1.1-4.6 | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ |
| Stamboulidis 2011-1 | 2000-2003 | 3 / 647 | 0.5 | 0.1-1.3 | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ |
| **Resistance to quinolones** | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ding 2015 | 2011-2013 | 1 / 108 | 0.9 | 0.0-4.5 | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ |
| Junejo 2011 | 2007-2009 | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | 1 / 7 | 0.143 | 0.7-53.0 | ­ | ­ | ­ | ­ | ­ | ­ |
| **Resistance to ampicillin** | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Marchisio 2013-3 | 2008- 2011 | 1 / 50 | 2.0 | 0.1-9.5 | 23 / 143 | 16.1 | 10.7-23.0 | 13 / 17 | 76.5 | 52.5-92.0 | ­ | ­ | ­ | 0 / 49 | 0.0 | 0-5.9 | 4 / 4 | 100.0 | 47.3-100.0 |
| Marchisio 2013-2 | 2005- 2007 | 1 / 19 | 5.2 | 0.3-23.3 | 2 / 35 | 5.7 | 1.0-17.6 | 2 / 4 | 50.0 | 9.4-90.6 | ­ | ­ | ­ | 0 / 14 | 0.0 | 0.0-19.3 | 0 / 0 | 0.0 | 0-79.3 |
| Marchisio 2013-1 | 2001- 2004 | 0 / 22 | 0.0 | 0.0-12.7 | 1 / 42 | 2.4 | 0.1-11.2 | 7 / 12 | 58.3 | 30.2-82.8 | ­ | ­ | ­ | 0 / 20 | 0.0 | 0.0-13.9 | 1 / 1 | 100.0 | 20.7-100.0 |
| Grevers 2012 | 2008- 2010 | 0 / 10 | 0.0 | 0.0-25.9 | 4 / 21 | 19.0 | 6.4-39.8 | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ | ­ |