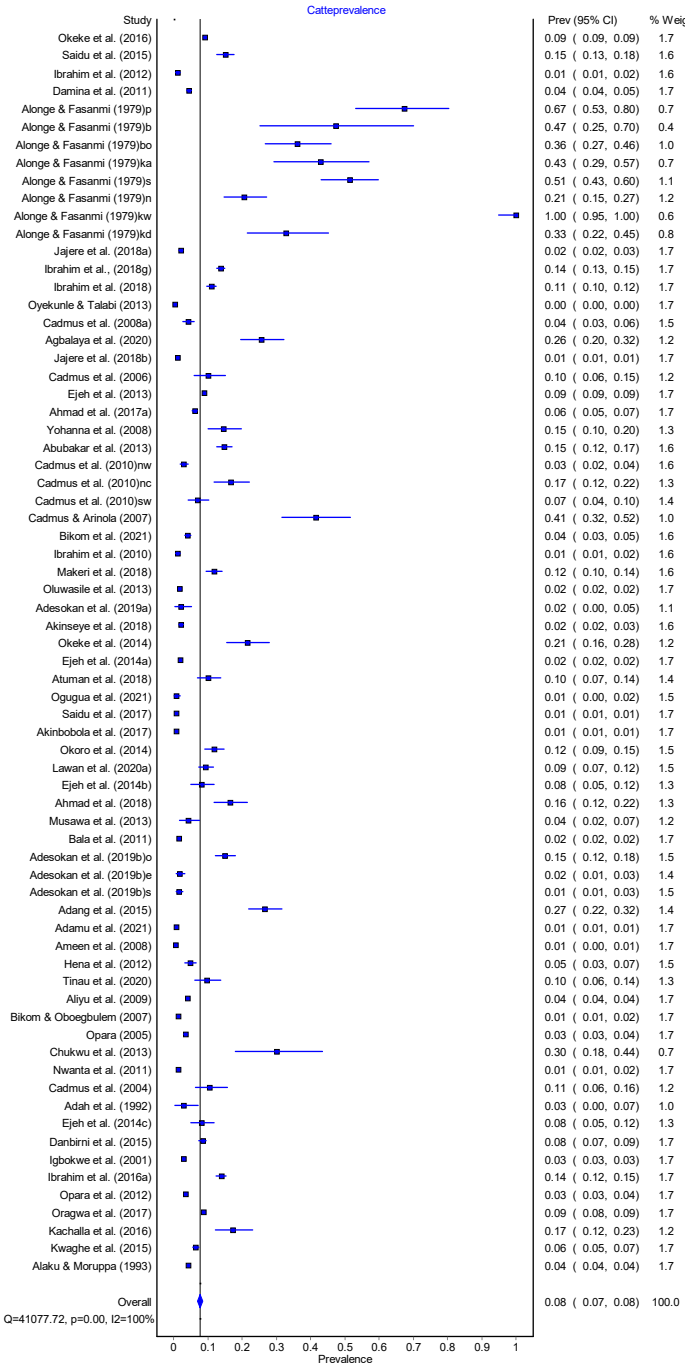
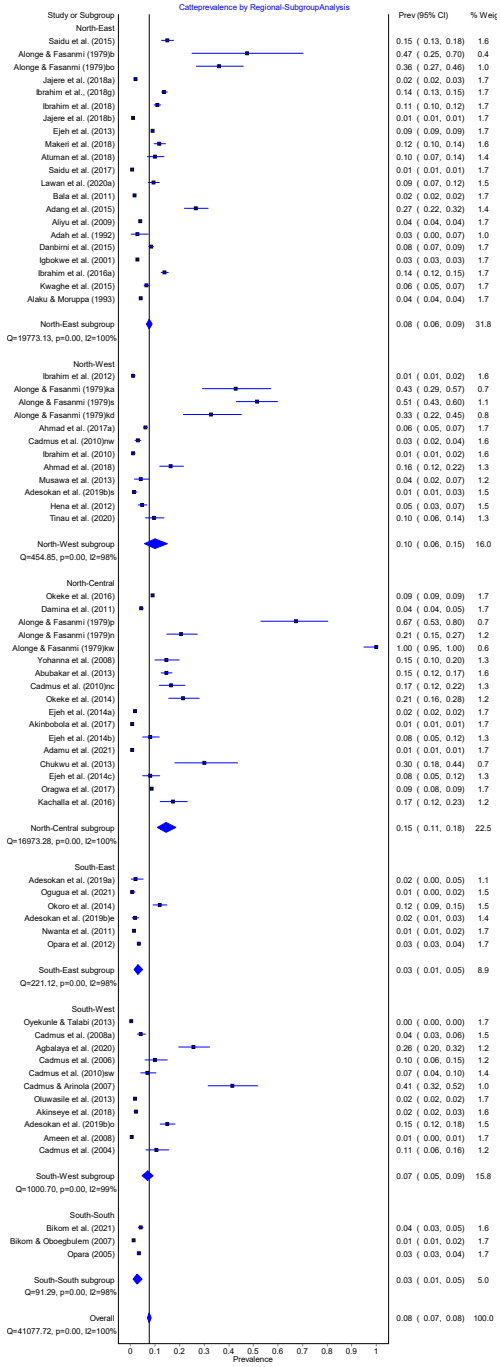
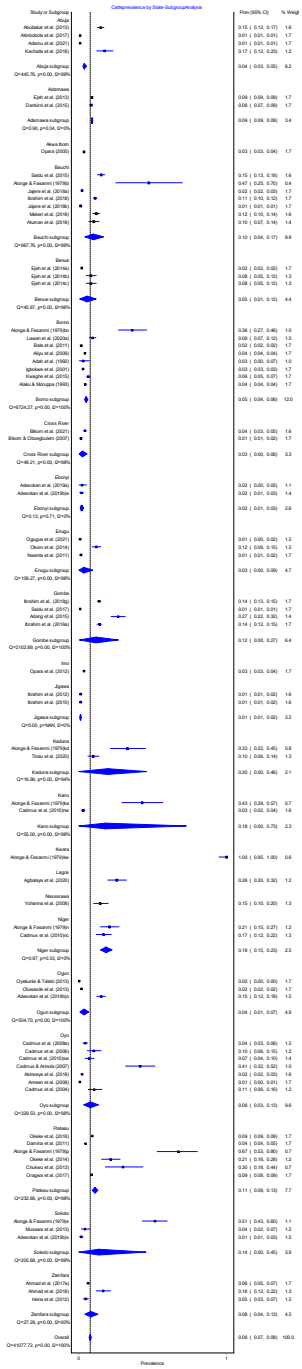
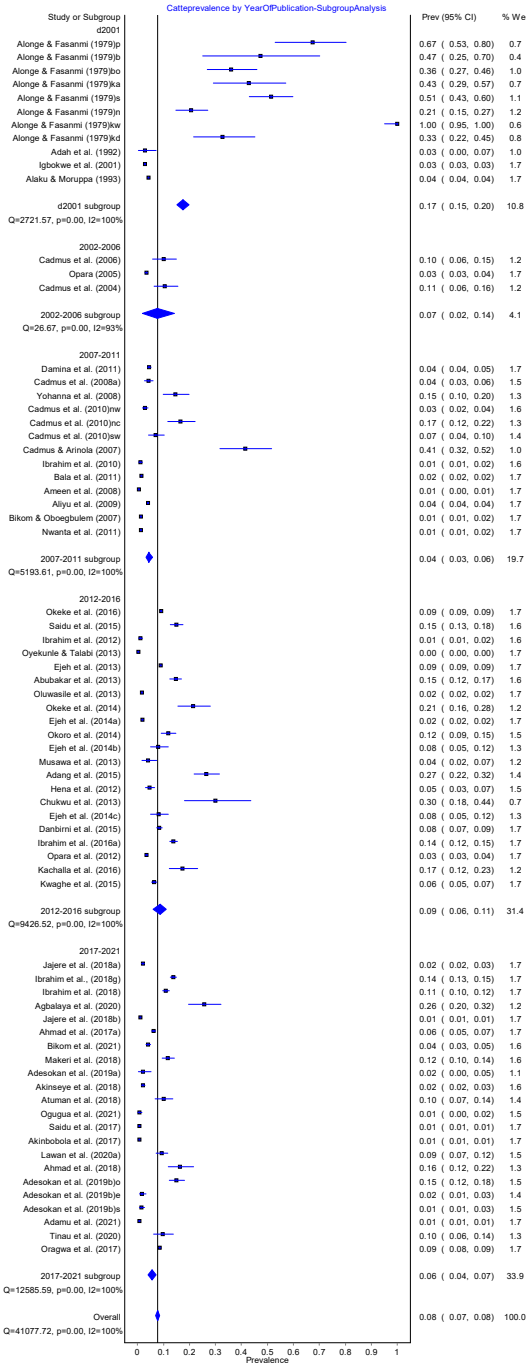
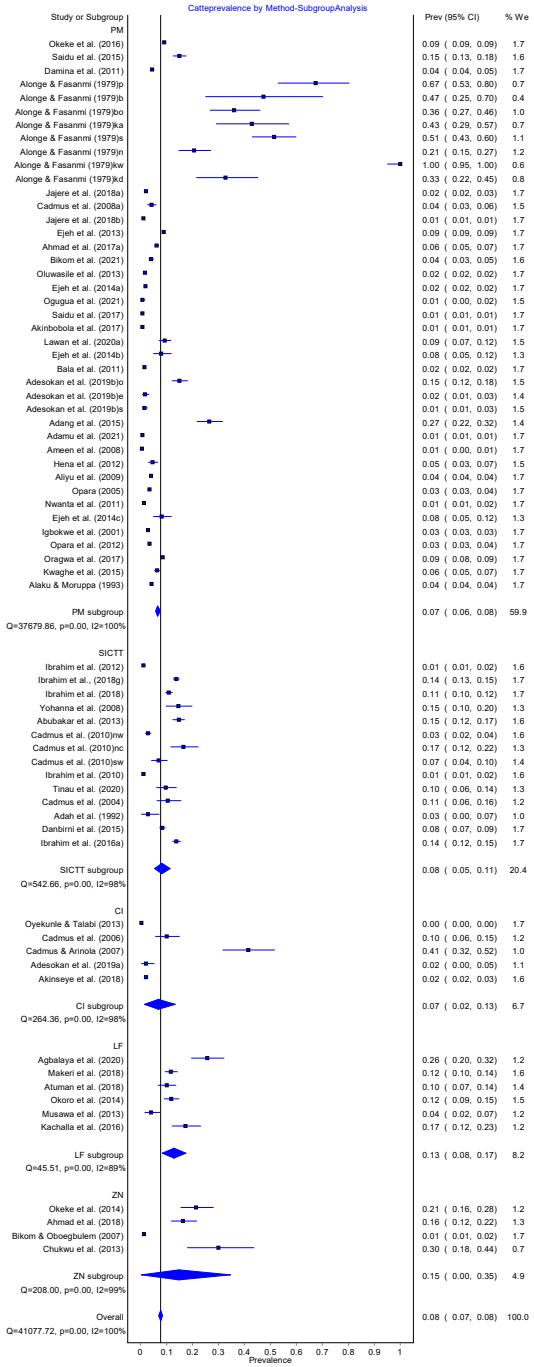
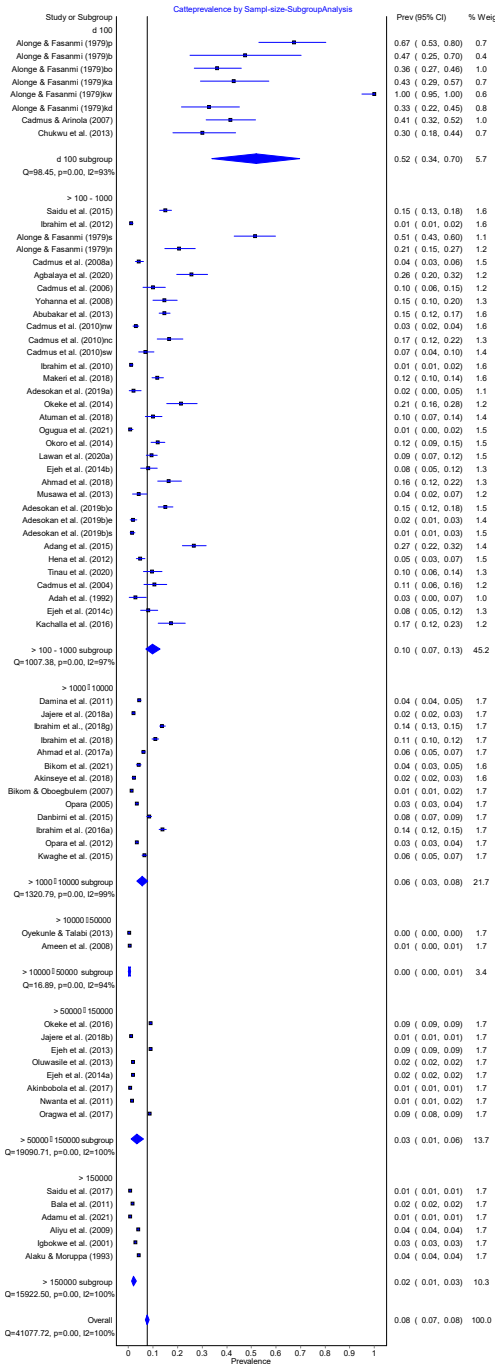

Catteprevalence
Study
Prev (95% CI)
% Weig
Okeke et al. (2016) 0.09 (0.09, 0.09) 1.7
Saidu et al. (2015) 0.15 (0.13, 0.18) 1.6
Ibrahim et al. (2012) 0.01 (0.01, 0.02) 1.6
Damina et al. (2011) 0.04 (0.04, 0.05) 1.7
Alonge & Fasanmi (1979)p 0.67 (0.53, 0.80) 0.7
Alonge & Fasanmi (1979)b 0.47 (0.25, 0.70) 0.4
Alonge & Fasanmi (1979)bo 0.36 (0.27, 0.46) 1.0
Alonge & Fasanmi (1979)ka 0.43 (0.29, 0.57) 0.7
Alonge & Fasanmi (1979)s 0.51 (0.43, 0.60) 1.1
Alonge & Fasanmi (1979)n 0.21 (0.15, 0.27) 1.2
Alonge & Fasanmi (1979)kw 1.00 (0.95, 1.00) 0.6
Alonge & Fasanmi (1979)kd 0.33 (0.22, 0.45) 0.8
Jajere et al. (2018a) 0.02 (0.02, 0.03) 1.7
Ibrahim et al., (2018g) 0.14 (0.13, 0.15) 1.7
Ibrahim et al. (2018) 0.11 (0.10, 0.12) 1.7
Oyekunle & Talabi (2013) 0.00 (0.00, 0.00) 1.7
Cadmus et al. (2008a) 0.04 (0.03, 0.06) 1.5
Agbalaya et al. (2020) 0.26 (0.20, 0.32) 1.2
Jajere et al. (2018b) 0.01 (0.01, 0.01) 1.7
Cadmus et al. (2006) 0.10 (0.06, 0.15) 1.2
Ejeh et al. (2013) 0.09 (0.09, 0.09) 1.7
Ahmad et al. (2017a) 0.06 (0.05, 0.07) 1.7
Yohanna et al. (2008) 0.15 (0.10, 0.20) 1.3
Abubakar et al. (2013) 0.15 (0.12, 0.17) 1.6
Cadmus et al. (2010)nw 0.03 (0.02, 0.04) 1.6
Cadmus et al. (2010)nc 0.17 (0.12, 0.22) 1.3
Cadmus et al. (2010)sw 0.07 (0.04, 0.10) 1.4
Cadmus & Arinola (2007) 0.41 (0.32, 0.52) 1.0
Bikom et al. (2021) 0.04 (0.03, 0.05) 1.6
Ibrahim et al. (2010) 0.01 (0.01, 0.02) 1.6
Makeri et al. (2018) 0.12 (0.10, 0.14) 1.6
Oluwasile et al. (2013) 0.02 (0.02, 0.02) 1.7
Adesokan et al. (2019a) 0.02 (0.00, 0.05) 1.1
Akinseye et al. (2018) 0.02 (0.02, 0.03) 1.6
Okeke et al. (2014) 0.21 (0.16, 0.28) 1.2
Ejeh et al. (2014a) 0.02 (0.02, 0.02) 1.7
Atuman et al. (2018) 0.10 (0.07, 0.14) 1.4
Ogugua et al. (2021) 0.01 (0.00, 0.02) 1.5
Saidu et al. (2017) 0.01 (0.01, 0.01) 1.7
Akinbobola et al. (2017) 0.01 (0.01, 0.01) 1.7
Okoro et al. (2014) 0.12 (0.09, 0.15) 1.5
Lawan et al. (2020a) 0.09 (0.07, 0.12) 1.5
Ejeh et al. (2014b) 0.08 (0.05, 0.12) 1.3
Ahmad et al. (2018) 0.16 (0.12, 0.22) 1.3
Musawa et al. (2013) 0.04 (0.02, 0.07) 1.2
Bala et al. (2011) 0.02 (0.02, 0.02) 1.7
Adesokan et al. (2019b)o 0.15 (0.12, 0.18) 1.5
Adesokan et al. (2019b)e 0.02 (0.01, 0.03) 1.4
Adesokan et al. (2019b)s 0.01 (0.01, 0.03) 1.5
Adang et al. (2015) 0.27 (0.22, 0.32) 1.4
Adamu et al. (2021) 0.01 (0.01, 0.01) 1.7
Ameen et al. (2008) 0.01 (0.00, 0.01) 1.7
Hena et al. (2012) 0.05 (0.03, 0.07) 1.5
Tinau et al. (2020) 0.10 (0.06, 0.14) 1.3
Aliyu et al. (2009) 0.04 (0.04, 0.04) 1.7
Bikom & Oboegbulem (2007) 0.01 (0.01, 0.02) 1.7
Opara (2005) 0.03 (0.03, 0.04) 1.7
Chukwu et al. (2013) 0.30 (0.18, 0.44) 0.7
Nwanta et al. (2011) 0.01 (0.01, 0.02) 1.7
Cadmus et al. (2004) 0.11 (0.06, 0.16) 1.2
Adah et al. (1992) 0.03 (0.00, 0.07) 1.0
Ejeh et al. (2014c) 0.08 (0.05, 0.12) 1.3
Danbirni et al. (2015) 0.08 (0.07, 0.09) 1.7
Igbokwe et al. (2001) 0.03 (0.03, 0.03) 1.7
Ibrahim et al. (2016a) 0.14 (0.12, 0.15) 1.7
Opara et al. (2012) 0.03 (0.03, 0.04) 1.7
Oragwa et al. (2017) 0.09 (0.08, 0.09) 1.7
Kachalla et al. (2016) 0.17 (0.12, 0.23) 1.2
Kwaghe et al. (2015) 0.06 (0.05, 0.07) 1.7
Alaku & Moruppa (1993) 0.04 (0.04, 0.04) 1.7
Overall 0.08 (0.07, 0.08) 100.0
Q=41077.72, p=0.00, I2=100%
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Prevalence

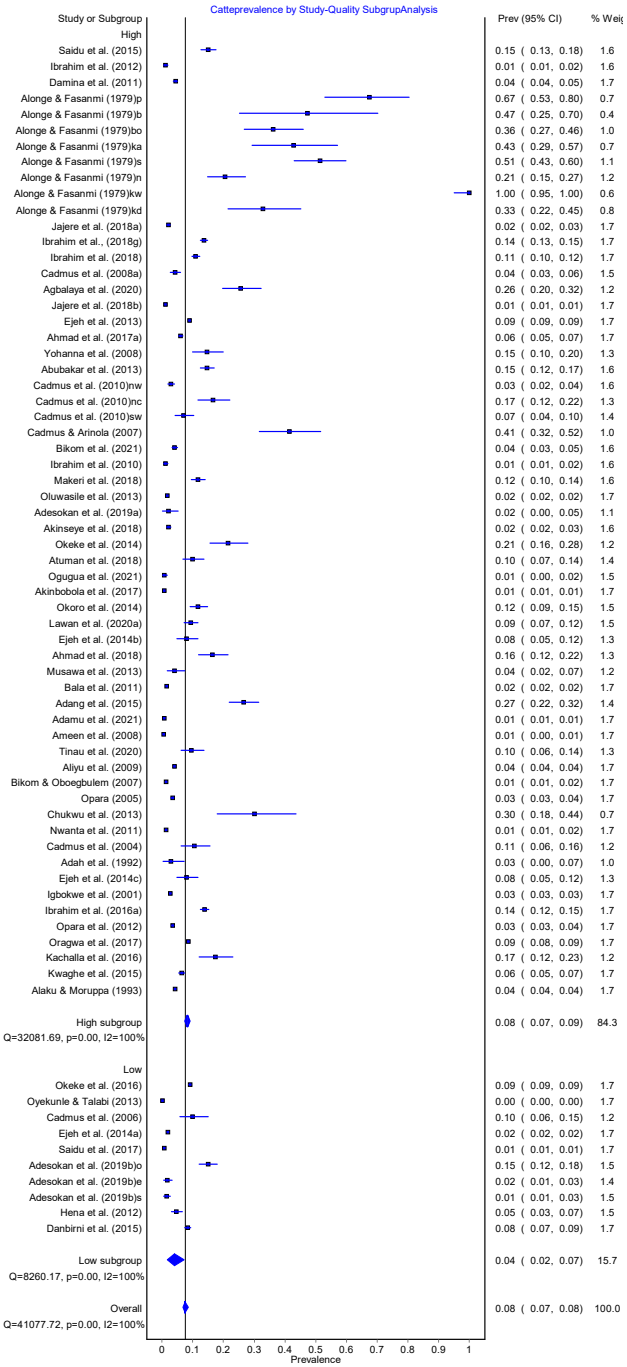

Cattleprevalence by Regional-SubgroupAnalysis
Study or Subgroup
Prev (95% CI)
% Weig
North-East
Saidu et al. (2015) 0.15 (0.13, 0.18) 1.6
Alonge & Fasanmi (1979)b 0.47 (0.25, 0.70) 0.4
Alonge & Fasanmi (1979)bo 0.36 (0.27, 0.46) 1.0
Jajere et al. (2018a) 0.02 (0.02, 0.03) 1.7
Ibrahim et al., (2018g) 0.14 (0.13, 0.15) 1.7
Ibrahim et al. (2018) 0.11 (0.10, 0.12) 1.7
Jajere et al. (2018b) 0.01 (0.01, 0.01) 1.7
Ejeh et al. (2013) 0.09 (0.09, 0.09) 1.7
Makeri et al. (2018) 0.12 (0.10, 0.14) 1.6
Atuman et al. (2018) 0.10 (0.07, 0.14) 1.4
Saidu et al. (2017) 0.01 (0.01, 0.01) 1.7
Lawan et al. (2020a) 0.09 (0.07, 0.12) 1.5
Bala et al. (2011) 0.02 (0.02, 0.02) 1.7
Adang et al. (2015) 0.27 (0.22, 0.32) 1.4
Aliyu et al. (2009) 0.04 (0.04, 0.04) 1.7
Adah et al. (1992) 0.03 (0.00, 0.07) 1.0
Danbirni et al. (2015) 0.08 (0.07, 0.09) 1.7
Igbokwe et al. (2001) 0.03 (0.03, 0.03) 1.7
Ibrahim et al. (2016a) 0.14 (0.12, 0.15) 1.7
Kwaghe et al. (2015) 0.06 (0.05, 0.07) 1.7
Alaku & Moruppa (1993) 0.04 (0.04, 0.04) 1.7
North-East subgroup 0.08 (0.06, 0.09) 31.8
Q=19773.13, p=0.00, I2=100%
North-West
Ibrahim et al. (2012) 0.01 (0.01, 0.02) 1.6
Alonge & Fasanmi (1979)ka 0.43 (0.29, 0.57) 0.7
Alonge & Fasanmi (1979)s 0.51 (0.43, 0.60) 1.1
Alonge & Fasanmi (1979)kd 0.33 (0.22, 0.45) 0.8
Ahmad et al. (2017a) 0.06 (0.05, 0.07) 1.7
Cadmus et al. (2010)nw 0.03 (0.02, 0.04) 1.6
Ibrahim et al. (2010) 0.01 (0.01, 0.02) 1.6
Ahmad et al. (2018) 0.16 (0.12, 0.22) 1.3
Musawa et al. (2013) 0.04 (0.02, 0.07) 1.2
Adesokan et al. (2019)ik 0.01 (0.01, 0.03) 1.5
Hena et al. (2012) 0.05 (0.03, 0.07) 1.5
Tinau et al. (2020) 0.10 (0.06, 0.14) 1.3
North-West subgroup 0.10 (0.06, 0.15) 16.0
Q=454.85, p=0.00, I2=98%
North-Central
Okeke et al. (2016) 0.09 (0.09, 0.09) 1.7
Damina et al. (2011) 0.04 (0.04, 0.05) 1.7
Alonge & Fasanmi (1979)p 0.67 (0.53, 0.80) 0.7
Alonge & Fasanmi (1979)n 0.21 (0.15, 0.27) 1.2
Alonge & Fasanmi (1979)kw 1.00 (0.95, 1.00) 0.6
Yohanna et al. (2008) 0.15 (0.10, 0.20) 1.3
Abubakar et al. (2013) 0.15 (0.12, 0.17) 1.6
Cadmus et al. (2010)nc 0.17 (0.12, 0.22) 1.3
Okeke et al. (2014) 0.21 (0.16, 0.28) 1.2
Ejeh et al. (2014a) 0.02 (0.02, 0.02) 1.7
Akinbobola et al. (2017) 0.01 (0.01, 0.01) 1.7
Ejeh et al. (2014b) 0.08 (0.05, 0.12) 1.3
Adamu et al. (2021) 0.01 (0.01, 0.01) 1.7
Chukwu et al. (2013) 0.30 (0.18, 0.44) 0.7
Ejeh et al. (2014c) 0.08 (0.05, 0.12) 1.3
Oragwa et al. (2017) 0.09 (0.08, 0.09) 1.7
Kachalla et al. (2016) 0.17 (0.12, 0.23) 1.2
North-Central subgroup 0.15 (0.11, 0.18) 22.5
Q=16973.28, p=0.00, I2=100%
South-East
Adesokan et al. (2019a) 0.02 (0.00, 0.05) 1.1
Ogugua et al. (2021) 0.01 (0.00, 0.02) 1.5
Okoro et al. (2014) 0.12 (0.09, 0.15) 1.5
Adesokan et al. (2019b)e 0.02 (0.01, 0.03) 1.4
Nwanta et al. (2011) 0.01 (0.01, 0.02) 1.7
Opara et al. (2012) 0.03 (0.03, 0.04) 1.7
South-East subgroup 0.03 (0.01, 0.05) 8.9
Q=221.12, p=0.00, I2=98%
South-West
Oyekunle & Talabi (2013) 0.00 (0.00, 0.00) 1.7
Cadmus et al. (2008a) 0.04 (0.03, 0.06) 1.5
Agbalaya et al. (2020) 0.26 (0.20, 0.32) 1.2
Cadmus et al. (2006) 0.10 (0.06, 0.15) 1.2
Cadmus et al. (2010)sw 0.07 (0.04, 0.10) 1.4
Cadmus & Arinola (2007) 0.41 (0.32, 0.52) 1.0
Oluwasile et al. (2013) 0.02 (0.02, 0.02) 1.7
Akinseye et al. (2018) 0.02 (0.02, 0.03) 1.6
Adesokan et al. (2019b)o 0.15 (0.12, 0.18) 1.5
Ameen et al. (2008) 0.01 (0.00, 0.01) 1.7
Cadmus et al. (2004) 0.11 (0.06, 0.16) 1.2
South-West subgroup 0.07 (0.05, 0.09) 15.8
Q=1000.70, p=0.00, I2=99%
South-South
Bikom et al. (2021) 0.04 (0.03, 0.05) 1.6
Bikom & Oboegbulem (2007) 0.01 (0.01, 0.02) 1.7
Opara (2005) 0.03 (0.03, 0.04) 1.7
South-South subgroup 0.03 (0.01, 0.05) 5.0
Q=91.29, p=0.00, I2=98%
Overall 0.08 (0.07, 0.08) 100.0
Q=41077.72, p=0.00, I2=100%
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Prevalence


Cattleprevalence by State-SubgroupAnalysis
Study or Subgroup
Prev (95% CI)
% Weigt
Abuja
Abubakar et al. (2013) 0.15 (0.12, 0.17) 1.6
Akintobola et al. (2017) 0.01 (0.01, 0.01) 1.7
Adamu et al. (2021) 0.01 (0.01, 0.01) 1.7
Kachalla et al. (2016) 0.17 (0.12, 0.23) 1.2
Abuja subgroup 0.04 (0.03, 0.05) 6.2
Q=145.76, p=0.00, I²=94%
Adamawa
Ejeh et al. (2013) 0.09 (0.09, 0.09) 1.7
Danbirni et al. (2015) 0.08 (0.07, 0.09) 1.7
Adamawa subgroup 0.09 (0.09, 0.09) 3.4
Q=0.00, p=0.94, I²=0%
Akwa Ibom
Opara (2005) 0.03 (0.03, 0.04) 1.7
Bauchi
Saidu et al. (2015) 0.15 (0.13, 0.18) 1.6
Akonga & Fasanmi (1979)b 0.47 (0.25, 0.70) 0.4
Jajere et al. (2018a) 0.02 (0.02, 0.03) 1.7
Ibrahim et al. (2018) 0.11 (0.10, 0.12) 1.7
Jajere et al. (2018b) 0.01 (0.01, 0.01) 1.7
Makeri et al. (2018) 0.12 (0.10, 0.14) 1.6
Atuman et al. (2018) 0.10 (0.07, 0.14) 1.4
Bauchi subgroup 0.10 (0.04, 0.17) 9.9
Q=987.76, p=0.00, I²=99%
Benue
Ejeh et al. (2014a) 0.02 (0.02, 0.02) 1.7
Ejeh et al. (2014b) 0.08 (0.05, 0.12) 1.3
Ejeh et al. (2014c) 0.08 (0.05, 0.12) 1.3
Benue subgroup 0.05 (0.01, 0.12) 4.4
Q=45.67, p=0.00, I²=96%
Borno
Akonga & Fasanmi (1979)bo 0.36 (0.27, 0.46) 1.0
Lawan et al. (2020a) 0.09 (0.07, 0.12) 1.5
Bale et al. (2011) 0.02 (0.02, 0.02) 1.7
Aliyu et al. (2008) 0.04 (0.04, 0.04) 1.7
Adah et al. (1992) 0.03 (0.00, 0.07) 1.0
Igbokwe et al. (2001) 0.03 (0.03, 0.03) 1.7
Kwaghe et al. (2015) 0.06 (0.05, 0.07) 1.7
Abbu & Mosugu (1980) 0.04 (0.04, 0.04) 1.7
Borno subgroup 0.05 (0.04, 0.06) 12.0
Q=6724.27, p=0.00, I²=100%
Cross River
Bikom et al. (2021) 0.04 (0.03, 0.05) 1.6
Bikom & Obasiguleri (2007) 0.01 (0.01, 0.02) 1.7
Cross River subgroup 0.03 (0.00, 0.06) 3.3
Q=48.21, p=0.00, I²=98%
Ebonyi
Adeosun et al. (2018a) 0.02 (0.00, 0.05) 1.1
Adeosun et al. (2018b)a 0.02 (0.01, 0.03) 1.4
Ebonyi subgroup 0.02 (0.01, 0.03) 2.6
Q=0.13, p=0.71, I²=0%
Enugu
Ogugua et al. (2021) 0.01 (0.00, 0.02) 1.5
Okoro et al. (2014) 0.12 (0.09, 0.15) 1.5
Nwanta et al. (2011) 0.01 (0.01, 0.02) 1.7
Enugu subgroup 0.03 (0.00, 0.09) 4.7
Q=159.27, p=0.00, I²=98%
Gombe
Ibrahim et al., (2018g) 0.14 (0.13, 0.15) 1.7
Saidu et al. (2017) 0.01 (0.01, 0.01) 1.7
Adang et al. (2015) 0.27 (0.22, 0.32) 1.4
Ibrahim et al. (2018e) 0.14 (0.12, 0.15) 1.7
Gombe subgroup 0.12 (0.00, 0.27) 6.4
Q=2102.88, p=0.00, I²=100%
Imo
Opara et al. (2012) 0.03 (0.03, 0.04) 1.7
Jigawa
Ibrahim et al. (2012) 0.01 (0.01, 0.02) 1.6
Ibrahim et al. (2015) 0.01 (0.01, 0.02) 1.6
Jigawa subgroup 0.01 (0.01, 0.02) 3.2
Q=0.00, p=NAN, I²=0%
Kaduna
Akonga & Fasanmi (1979)ad 0.33 (0.22, 0.45) 0.8
Timau et al. (2022) 0.10 (0.06, 0.14) 1.3
Kaduna subgroup 0.20 (0.00, 0.46) 2.1
Q=16.96, p=0.00, I²=94%
Kano
Akonga & Fasanmi (1979)ka 0.43 (0.29, 0.57) 0.7
Cadmus et al. (2010)ne 0.03 (0.02, 0.04) 1.6
Kano subgroup 0.18 (0.00, 0.73) 2.3
Q=92.00, p=0.00, I²=98%
Kwara
Akonga & Fasanmi (1979)kw 1.00 (0.95, 1.00) 0.6
Lagos
Agbalaya et al. (2020) 0.26 (0.20, 0.32) 1.2
Nassarawa
Yohanna et al. (2006) 0.15 (0.10, 0.20) 1.3
Niger
Akonga & Fasanmi (1979)n 0.21 (0.15, 0.27) 1.2
Cadmus et al. (2010)nc 0.17 (0.12, 0.22) 1.3
Niger subgroup 0.19 (0.15, 0.23) 2.5
Q=0.97, p=0.33, I²=0%
Ogun
Oyekunle & Talabi (2012) 0.00 (0.00, 0.00) 1.7
Oluwasile et al. (2013) 0.02 (0.02, 0.02) 1.7
Adeosun et al. (2018)go 0.15 (0.12, 0.18) 1.5
Ogun subgroup 0.04 (0.01, 0.07) 4.9
Q=504.70, p=0.00, I²=100%
Oyo
Cadmus et al. (2009a) 0.04 (0.03, 0.06) 1.5
Cadmus et al. (2008) 0.15 (0.08, 0.15) 1.2
Cadmus et al. (2010)aw 0.07 (0.04, 0.10) 1.4
Cadmus & Ariwoola (2007) 0.41 (0.32, 0.52) 1.0
Akinseye et al. (2018) 0.02 (0.02, 0.03) 1.6
Ansari et al. (2008) 0.01 (0.00, 0.01) 1.7
Cadmus et al. (2006) 0.11 (0.06, 0.16) 1.2
Oyo subgroup 0.08 (0.03, 0.13) 9.6
Q=339.53, p=0.00, I²=98%
Plateau
Okeke et al. (2016) 0.09 (0.09, 0.09) 1.7
Damona et al. (2011) 0.04 (0.04, 0.05) 1.7
Akonga & Fasanmi (1979)g 0.67 (0.53, 0.80) 0.7
Okeke et al. (2014) 0.21 (0.16, 0.26) 1.2
Chuwa et al. (2015) 0.28 (0.18, 0.40) 0.7
Onagwa et al. (2017) 0.09 (0.09, 0.09) 1.7
Plateau subgroup 0.11 (0.09, 0.13) 7.7
Q=232.68, p=0.00, I²=98%
Sokoto
Akonga & Fasanmi (1979)s 0.51 (0.43, 0.60) 1.1
Musawa et al. (2013) 0.04 (0.02, 0.07) 1.2
Adeosun et al. (2018)ss 0.01 (0.01, 0.03) 1.5
Sokoto subgroup 0.14 (0.00, 0.45) 3.9
Q=355.68, p=0.00, I²=99%
Zamfara
Ahmad et al. (2017a) 0.06 (0.05, 0.07) 1.7
Ahmad et al. (2018) 0.16 (0.12, 0.20) 1.3
Hena et al. (2012) 0.05 (0.03, 0.07) 1.5
Zamfara subgroup 0.08 (0.04, 0.13) 4.5
Q=37.39, p=0.00, I²=92%
Overall
0.08 (0.07, 0.09) 100.0
Q=6377.72, p=0.00, I²=100%
0
1
Prevalence


Catteprevalence by YearOfPublication-SubgroupAnalysis
Study or Subgroup
Prev (95% CI)
% We
d2001
Alonge & Fasanmi (1979)p 0.67 (0.53, 0.80) 0.7
Alonge & Fasanmi (1979)b 0.47 (0.25, 0.70) 0.4
Alonge & Fasanmi (1979)bo 0.36 (0.27, 0.46) 1.0
Alonge & Fasanmi (1979)ka 0.43 (0.29, 0.57) 0.7
Alonge & Fasanmi (1979)s 0.51 (0.43, 0.60) 1.1
Alonge & Fasanmi (1979)n 0.21 (0.15, 0.27) 1.2
Alonge & Fasanmi (1979)kw 1.00 (0.95, 1.00) 0.6
Alonge & Fasanmi (1979)kd 0.33 (0.22, 0.45) 0.8
Adah et al. (1992) 0.03 (0.00, 0.07) 1.0
Igbokwe et al. (2001) 0.03 (0.03, 0.03) 1.7
Alaku & Moruppa (1993) 0.04 (0.04, 0.04) 1.7
d2001 subgroup 0.17 (0.15, 0.20) 10.8
Q=2721.57, p=0.00, I2=100%
2002-2006
Cadmus et al. (2006) 0.10 (0.06, 0.15) 1.2
Opara (2005) 0.03 (0.03, 0.04) 1.7
Cadmus et al. (2004) 0.11 (0.06, 0.16) 1.2
2002-2006 subgroup 0.07 (0.02, 0.14) 4.1
Q=26.67, p=0.00, I2=93%
2007-2011
Damina et al. (2011) 0.04 (0.04, 0.05) 1.7
Cadmus et al. (2008a) 0.04 (0.03, 0.06) 1.5
Yohanna et al. (2008) 0.15 (0.10, 0.20) 1.3
Cadmus et al. (2010)nw 0.03 (0.02, 0.04) 1.6
Cadmus et al. (2010)nc 0.17 (0.12, 0.22) 1.3
Cadmus et al. (2010)sw 0.07 (0.04, 0.10) 1.4
Cadmus & Arinola (2007) 0.41 (0.32, 0.52) 1.0
Ibrahim et al. (2010) 0.01 (0.01, 0.02) 1.6
Bala et al. (2011) 0.02 (0.02, 0.02) 1.7
Ameen et al. (2008) 0.01 (0.00, 0.01) 1.7
Aliyu et al. (2009) 0.04 (0.04, 0.04) 1.7
Bikom & Oboegbulem (2007) 0.01 (0.01, 0.02) 1.7
Nwanta et al. (2011) 0.01 (0.01, 0.02) 1.7
2007-2011 subgroup 0.04 (0.03, 0.06) 19.7
Q=5193.61, p=0.00, I2=100%
2012-2016
Okeke et al. (2016) 0.09 (0.09, 0.09) 1.7
Saidu et al. (2015) 0.15 (0.13, 0.18) 1.6
Ibrahim et al. (2012) 0.01 (0.01, 0.02) 1.6
Oyekunle & Talabi (2013) 0.00 (0.00, 0.00) 1.7
Ejeh et al. (2013) 0.09 (0.09, 0.09) 1.7
Abubakar et al. (2013) 0.15 (0.12, 0.17) 1.6
Oluwasile et al. (2013) 0.02 (0.02, 0.02) 1.7
Okeke et al. (2014) 0.21 (0.16, 0.28) 1.2
Ejeh et al. (2014a) 0.02 (0.02, 0.02) 1.7
Okoro et al. (2014) 0.12 (0.09, 0.15) 1.5
Ejeh et al. (2014b) 0.08 (0.05, 0.12) 1.3
Musawa et al. (2013) 0.04 (0.02, 0.07) 1.2
Adang et al. (2015) 0.27 (0.22, 0.32) 1.4
Hena et al. (2012) 0.05 (0.03, 0.07) 1.5
Chukwu et al. (2013) 0.30 (0.18, 0.44) 0.7
Ejeh et al. (2014c) 0.08 (0.05, 0.12) 1.3
Danbirni et al. (2015) 0.08 (0.07, 0.09) 1.7
Ibrahim et al. (2016a) 0.14 (0.12, 0.15) 1.7
Opara et al. (2012) 0.03 (0.03, 0.04) 1.7
Kachalla et al. (2016) 0.17 (0.12, 0.23) 1.2
Kwaghe et al. (2015) 0.06 (0.05, 0.07) 1.7
2012-2016 subgroup 0.09 (0.06, 0.11) 31.4
Q=9426.52, p=0.00, I2=100%
2017-2021
Jajere et al. (2018a) 0.02 (0.02, 0.03) 1.7
Ibrahim et al., (2018g) 0.14 (0.13, 0.15) 1.7
Ibrahim et al. (2018) 0.11 (0.10, 0.12) 1.7
Agbalaya et al. (2020) 0.26 (0.20, 0.32) 1.2
Jajere et al. (2018b) 0.01 (0.01, 0.01) 1.7
Ahmad et al. (2017a) 0.06 (0.05, 0.07) 1.7
Bikom et al. (2021) 0.04 (0.03, 0.05) 1.6
Makeri et al. (2018) 0.12 (0.10, 0.14) 1.6
Adesokan et al. (2019a) 0.02 (0.00, 0.05) 1.1
Akinseye et al. (2018) 0.02 (0.02, 0.03) 1.6
Atuman et al. (2018) 0.10 (0.07, 0.14) 1.4
Ogugua et al. (2021) 0.01 (0.00, 0.02) 1.5
Saidu et al. (2017) 0.01 (0.01, 0.01) 1.7
Akinbobola et al. (2017) 0.01 (0.01, 0.01) 1.7
Lawan et al. (2020a) 0.09 (0.07, 0.12) 1.5
Ahmad et al. (2018) 0.16 (0.12, 0.22) 1.3
Adesokan et al. (2019b)o 0.15 (0.12, 0.18) 1.5
Adesokan et al. (2019b)e 0.02 (0.01, 0.03) 1.4
Adesokan et al. (2019b)s 0.01 (0.01, 0.03) 1.5
Adamu et al. (2021) 0.01 (0.01, 0.01) 1.7
Tinau et al. (2020) 0.10 (0.06, 0.14) 1.3
Oragwa et al. (2017) 0.09 (0.08, 0.09) 1.7
2017-2021 subgroup 0.06 (0.04, 0.07) 33.9
Q=12585.59, p=0.00, I2=100%
Overall 0.08 (0.07, 0.08) 100.0
Q=41077.72, p=0.00, I2=100%
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Prevalence


Cattleprevalence by Method-SubgroupAnalysis
Study or Subgroup
Prev (95% CI)
% We
PM
Okeke et al. (2016) 0.09 (0.09, 0.09) 1.7
Saidu et al. (2015) 0.15 (0.13, 0.18) 1.6
Damina et al. (2011) 0.04 (0.04, 0.05) 1.7
Alonge & Fasanmi (1979)p 0.67 (0.53, 0.80) 0.7
Alonge & Fasanmi (1979)b 0.47 (0.25, 0.70) 0.4
Alonge & Fasanmi (1979)bo 0.36 (0.27, 0.46) 1.0
Alonge & Fasanmi (1979)ka 0.43 (0.29, 0.57) 0.7
Alonge & Fasanmi (1979)s 0.51 (0.43, 0.60) 1.1
Alonge & Fasanmi (1979)n 0.21 (0.15, 0.27) 1.2
Alonge & Fasanmi (1979)kw 1.00 (0.95, 1.00) 0.6
Alonge & Fasanmi (1979)kd 0.33 (0.22, 0.45) 0.8
Jajere et al. (2018a) 0.02 (0.02, 0.03) 1.7
Cadmus et al. (2008a) 0.04 (0.03, 0.06) 1.5
Jajere et al. (2018b) 0.01 (0.01, 0.01) 1.7
Ejeh et al. (2013) 0.09 (0.09, 0.09) 1.7
Ahmad et al. (2017a) 0.06 (0.05, 0.07) 1.7
Bikom et al. (2021) 0.04 (0.03, 0.05) 1.6
Oluwasile et al. (2013) 0.02 (0.02, 0.02) 1.7
Ejeh et al. (2014a) 0.02 (0.02, 0.02) 1.7
Ogugua et al. (2021) 0.01 (0.00, 0.02) 1.5
Saidu et al. (2017) 0.01 (0.01, 0.01) 1.7
Akinbobola et al. (2017) 0.01 (0.01, 0.01) 1.7
Lawan et al. (2020a) 0.09 (0.07, 0.12) 1.5
Ejeh et al. (2014b) 0.08 (0.05, 0.12) 1.3
Bala et al. (2011) 0.02 (0.02, 0.02) 1.7
Adesokan et al. (2019b)o 0.15 (0.12, 0.18) 1.5
Adesokan et al. (2019b)e 0.02 (0.01, 0.03) 1.4
Adesokan et al. (2019b)s 0.01 (0.01, 0.03) 1.5
Adang et al. (2015) 0.27 (0.22, 0.32) 1.4
Adamu et al. (2021) 0.01 (0.01, 0.01) 1.7
Ameen et al. (2008) 0.01 (0.00, 0.01) 1.7
Hena et al. (2012) 0.05 (0.03, 0.07) 1.5
Aliyu et al. (2009) 0.04 (0.04, 0.04) 1.7
Opara (2005) 0.03 (0.03, 0.04) 1.7
Nwanta et al. (2011) 0.01 (0.01, 0.02) 1.7
Ejeh et al. (2014c) 0.08 (0.05, 0.12) 1.3
Igbokwe et al. (2001) 0.03 (0.03, 0.03) 1.7
Opara et al. (2012) 0.03 (0.03, 0.04) 1.7
Oragwa et al. (2017) 0.09 (0.08, 0.09) 1.7
Kwaghe et al. (2015) 0.06 (0.05, 0.07) 1.7
Alaku & Moruppa (1993) 0.04 (0.04, 0.04) 1.7
PM subgroup 0.07 (0.06, 0.08) 59.9
Q=37679.86, p=0.00, I2=100%
SICTT
Ibrahim et al. (2012) 0.01 (0.01, 0.02) 1.6
Ibrahim et al., (2018g) 0.14 (0.13, 0.15) 1.7
Ibrahim et al. (2018) 0.11 (0.10, 0.12) 1.7
Yohanna et al. (2008) 0.15 (0.10, 0.20) 1.3
Abubakar et al. (2013) 0.15 (0.12, 0.17) 1.6
Cadmus et al. (2010)nw 0.03 (0.02, 0.04) 1.6
Cadmus et al. (2010)nc 0.17 (0.12, 0.22) 1.3
Cadmus et al. (2010)sw 0.07 (0.04, 0.10) 1.4
Ibrahim et al. (2010) 0.01 (0.01, 0.02) 1.6
Tinau et al. (2020) 0.10 (0.06, 0.14) 1.3
Cadmus et al. (2004) 0.11 (0.06, 0.16) 1.2
Adah et al. (1992) 0.03 (0.00, 0.07) 1.0
Danbirni et al. (2015) 0.08 (0.07, 0.09) 1.7
Ibrahim et al. (2016a) 0.14 (0.12, 0.15) 1.7
SICTT subgroup 0.08 (0.05, 0.11) 20.4
Q=542.66, p=0.00, I2=98%
CI
Oyekunle & Talabi (2013) 0.00 (0.00, 0.00) 1.7
Cadmus et al. (2006) 0.10 (0.06, 0.15) 1.2
Cadmus & Arinola (2007) 0.41 (0.32, 0.52) 1.0
Adesokan et al. (2019a) 0.02 (0.00, 0.05) 1.1
Akinseye et al. (2018) 0.02 (0.02, 0.03) 1.6
CI subgroup 0.07 (0.02, 0.13) 6.7
Q=264.36, p=0.00, I2=98%
LF
Agbalaya et al. (2020) 0.26 (0.20, 0.32) 1.2
Makeri et al. (2018) 0.12 (0.10, 0.14) 1.6
Atuman et al. (2018) 0.10 (0.07, 0.14) 1.4
Okoro et al. (2014) 0.12 (0.09, 0.15) 1.5
Musawa et al. (2013) 0.04 (0.02, 0.07) 1.2
Kachalla et al. (2016) 0.17 (0.12, 0.23) 1.2
LF subgroup 0.13 (0.08, 0.17) 8.2
Q=45.51, p=0.00, I2=89%
ZN
Okeke et al. (2014) 0.21 (0.16, 0.28) 1.2
Ahmad et al. (2018) 0.16 (0.12, 0.22) 1.3
Bikom & Oboegbulem (2007) 0.01 (0.01, 0.02) 1.7
Chukwu et al. (2013) 0.30 (0.18, 0.44) 0.7
ZN subgroup 0.15 (0.00, 0.35) 4.9
Q=208.00, p=0.00, I2=99%
Overall 0.08 (0.07, 0.08) 100.0
Q=41077.72, p=0.00, I2=100%
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Prevalence


Cattleprevalence by Sampl-size-SubgroupAnalysis
Study or Subgroup
Prev (95% CI)
% Weig
d 100
Alonge & Fasanmi (1979)p 0.67 (0.53, 0.80) 0.7
Alonge & Fasanmi (1979)b 0.47 (0.25, 0.70) 0.4
Alonge & Fasanmi (1979)bo 0.36 (0.27, 0.46) 1.0
Alonge & Fasanmi (1979)ka 0.43 (0.29, 0.57) 0.7
Alonge & Fasanmi (1979)kw 1.00 (0.95, 1.00) 0.6
Alonge & Fasanmi (1979)kd 0.33 (0.22, 0.45) 0.8
Cadmus & Arinola (2007) 0.41 (0.32, 0.52) 1.0
Chukwu et al. (2013) 0.30 (0.18, 0.44) 0.7
d 100 subgroup 0.52 (0.34, 0.70) 5.7
Q=98.45, p=0.00, I2=93%
> 100 - 1000
Saidu et al. (2015) 0.15 (0.13, 0.18) 1.6
Ibrahim et al. (2012) 0.01 (0.01, 0.02) 1.6
Alonge & Fasanmi (1979)s 0.51 (0.43, 0.60) 1.1
Alonge & Fasanmi (1979)n 0.21 (0.15, 0.27) 1.2
Cadmus et al. (2008a) 0.04 (0.03, 0.06) 1.5
Agbalaya et al. (2020) 0.26 (0.20, 0.32) 1.2
Cadmus et al. (2006) 0.10 (0.06, 0.15) 1.2
Yohanna et al. (2008) 0.15 (0.10, 0.20) 1.3
Abubakar et al. (2013) 0.15 (0.12, 0.17) 1.6
Cadmus et al. (2010)nw 0.03 (0.02, 0.04) 1.6
Cadmus et al. (2010)nc 0.17 (0.12, 0.22) 1.3
Cadmus et al. (2010)sw 0.07 (0.04, 0.10) 1.4
Ibrahim et al. (2010) 0.01 (0.01, 0.02) 1.6
Makeri et al. (2018) 0.12 (0.10, 0.14) 1.6
Adesokan et al. (2019a) 0.02 (0.00, 0.05) 1.1
Okeke et al. (2014) 0.21 (0.16, 0.28) 1.2
Atuman et al. (2018) 0.10 (0.07, 0.14) 1.4
Ogugua et al. (2021) 0.01 (0.00, 0.02) 1.5
Okoro et al. (2014) 0.12 (0.09, 0.15) 1.5
Lawan et al. (2020a) 0.09 (0.07, 0.12) 1.5
Ejeh et al. (2014b) 0.08 (0.05, 0.12) 1.3
Ahmad et al. (2018) 0.16 (0.12, 0.22) 1.3
Musawa et al. (2013) 0.04 (0.02, 0.07) 1.2
Adesokan et al. (2019b)o 0.15 (0.12, 0.18) 1.5
Adesokan et al. (2019b)e 0.02 (0.01, 0.03) 1.4
Adesokan et al. (2019b)s 0.01 (0.01, 0.03) 1.5
Adang et al. (2015) 0.27 (0.22, 0.32) 1.4
Hena et al. (2012) 0.05 (0.03, 0.07) 1.5
Tinau et al. (2020) 0.10 (0.06, 0.14) 1.3
Cadmus et al. (2004) 0.11 (0.06, 0.16) 1.2
Adah et al. (1992) 0.03 (0.00, 0.07) 1.0
Ejeh et al. (2014c) 0.08 (0.05, 0.12) 1.3
Kachalla et al. (2016) 0.17 (0.12, 0.23) 1.2
> 100 - 1000 subgroup 0.10 (0.07, 0.13) 45.2
Q=1007.38, p=0.00, I2=97%
> 1000 - 10000
Damina et al. (2011) 0.04 (0.04, 0.05) 1.7
Jajere et al. (2018a) 0.02 (0.02, 0.03) 1.7
Ibrahim et al., (2018g) 0.14 (0.13, 0.15) 1.7
Ibrahim et al. (2018) 0.11 (0.10, 0.12) 1.7
Ahmad et al. (2017a) 0.06 (0.05, 0.07) 1.7
Bikom et al. (2021) 0.04 (0.03, 0.05) 1.6
Akinseye et al. (2018) 0.02 (0.02, 0.03) 1.6
Bikom & Oboegbulem (2007) 0.01 (0.01, 0.02) 1.7
Opara (2005) 0.03 (0.03, 0.04) 1.7
Danbirni et al. (2015) 0.08 (0.07, 0.09) 1.7
Ibrahim et al. (2016a) 0.14 (0.12, 0.15) 1.7
Opara et al. (2012) 0.03 (0.03, 0.04) 1.7
Kwaghe et al. (2015) 0.06 (0.05, 0.07) 1.7
> 1000 - 10000 subgroup 0.06 (0.03, 0.08) 21.7
Q=1320.79, p=0.00, I2=99%
> 10000 - 50000
Oyekunle & Talabi (2013) 0.00 (0.00, 0.00) 1.7
Ameen et al. (2008) 0.01 (0.00, 0.01) 1.7
> 10000 - 50000 subgroup 0.00 (0.00, 0.01) 3.4
Q=16.89, p=0.00, I2=94%
> 50000 - 150000
Okeke et al. (2016) 0.09 (0.09, 0.09) 1.7
Jajere et al. (2018b) 0.01 (0.01, 0.01) 1.7
Ejeh et al. (2013) 0.09 (0.09, 0.09) 1.7
Oluwasile et al. (2013) 0.02 (0.02, 0.02) 1.7
Ejeh et al. (2014a) 0.02 (0.02, 0.02) 1.7
Akinbobola et al. (2017) 0.01 (0.01, 0.01) 1.7
Nwanta et al. (2011) 0.01 (0.01, 0.02) 1.7
Oragwa et al. (2017) 0.09 (0.08, 0.09) 1.7
> 50000 - 150000 subgroup 0.03 (0.01, 0.06) 13.7
Q=19090.71, p=0.00, I2=100%
> 150000
Saidu et al. (2017) 0.01 (0.01, 0.01) 1.7
Bala et al. (2011) 0.02 (0.02, 0.02) 1.7
Adamu et al. (2021) 0.01 (0.01, 0.01) 1.7
Aliyu et al. (2009) 0.04 (0.04, 0.04) 1.7
Igbokwe et al. (2001) 0.03 (0.03, 0.03) 1.7
Alaku & Moruppa (1993) 0.04 (0.04, 0.04) 1.7
> 150000 subgroup 0.02 (0.01, 0.03) 10.3
Q=15922.50, p=0.00, I2=100%
Overall 0.08 (0.07, 0.08) 100.0
Q=41077.72, p=0.00, I2=100%
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Prevalence


Catteprevalence by Study-Quality SubgrupAnalysis
Study or Subgroup
Prev (95% CI)
% Weig
High
Saidu et al. (2015) 0.15 (0.13, 0.18) 1.6
Ibrahim et al. (2012) 0.01 (0.01, 0.02) 1.6
Damina et al. (2011) 0.04 (0.04, 0.05) 1.7
Alonge & Fasanmi (1979)p 0.67 (0.53, 0.80) 0.7
Alonge & Fasanmi (1979)b 0.47 (0.25, 0.70) 0.4
Alonge & Fasanmi (1979)bo 0.36 (0.27, 0.46) 1.0
Alonge & Fasanmi (1979)ka 0.43 (0.29, 0.57) 0.7
Alonge & Fasanmi (1979)s 0.51 (0.43, 0.60) 1.1
Alonge & Fasanmi (1979)n 0.21 (0.15, 0.27) 1.2
Alonge & Fasanmi (1979)kw 1.00 (0.95, 1.00) 0.6
Alonge & Fasanmi (1979)kd 0.33 (0.22, 0.45) 0.8
Jajere et al. (2018a) 0.02 (0.02, 0.03) 1.7
Ibrahim et al., (2018g) 0.14 (0.13, 0.15) 1.7
Ibrahim et al. (2018) 0.11 (0.10, 0.12) 1.7
Cadmus et al. (2008a) 0.04 (0.03, 0.06) 1.5
Agbalaya et al. (2020) 0.26 (0.20, 0.32) 1.2
Jajere et al. (2018b) 0.01 (0.01, 0.01) 1.7
Ejeh et al. (2013) 0.09 (0.09, 0.09) 1.7
Ahmad et al. (2017a) 0.06 (0.05, 0.07) 1.7
Yohanna et al. (2008) 0.15 (0.10, 0.20) 1.3
Abubakar et al. (2013) 0.15 (0.12, 0.17) 1.6
Cadmus et al. (2010)nw 0.03 (0.02, 0.04) 1.6
Cadmus et al. (2010)nc 0.17 (0.12, 0.22) 1.3
Cadmus et al. (2010)sw 0.07 (0.04, 0.10) 1.4
Cadmus & Arinola (2007) 0.41 (0.32, 0.52) 1.0
Bikom et al. (2021) 0.04 (0.03, 0.05) 1.6
Ibrahim et al. (2010) 0.01 (0.01, 0.02) 1.6
Makeri et al. (2018) 0.12 (0.10, 0.14) 1.6
Oluwasile et al. (2013) 0.02 (0.02, 0.02) 1.7
Adesokan et al. (2019a) 0.02 (0.00, 0.05) 1.1
Akinseye et al. (2018) 0.02 (0.02, 0.03) 1.6
Okeke et al. (2014) 0.21 (0.16, 0.28) 1.2
Atuman et al. (2018) 0.10 (0.07, 0.14) 1.4
Ogugua et al. (2021) 0.01 (0.00, 0.02) 1.5
Akinbobola et al. (2017) 0.01 (0.01, 0.01) 1.7
Okoro et al. (2014) 0.12 (0.09, 0.15) 1.5
Lawan et al. (2020a) 0.09 (0.07, 0.12) 1.5
Ejeh et al. (2014b) 0.08 (0.05, 0.12) 1.3
Ahmad et al. (2018) 0.16 (0.12, 0.22) 1.3
Musawa et al. (2013) 0.04 (0.02, 0.07) 1.2
Bala et al. (2011) 0.02 (0.02, 0.02) 1.7
Adang et al. (2015) 0.27 (0.22, 0.32) 1.4
Adamu et al. (2021) 0.01 (0.01, 0.01) 1.7
Ameen et al. (2008) 0.01 (0.00, 0.01) 1.7
Tinau et al. (2020) 0.10 (0.06, 0.14) 1.3
Aliyu et al. (2009) 0.04 (0.04, 0.04) 1.7
Bikom & Oboegbulem (2007) 0.01 (0.01, 0.02) 1.7
Opara (2005) 0.03 (0.03, 0.04) 1.7
Chukwu et al. (2013) 0.30 (0.18, 0.44) 0.7
Nwanta et al. (2011) 0.01 (0.01, 0.02) 1.7
Cadmus et al. (2004) 0.11 (0.06, 0.16) 1.2
Adah et al. (1992) 0.03 (0.00, 0.07) 1.0
Ejeh et al. (2014c) 0.08 (0.05, 0.12) 1.3
Igbokwe et al. (2001) 0.03 (0.03, 0.03) 1.7
Ibrahim et al. (2016a) 0.14 (0.12, 0.15) 1.7
Opara et al. (2012) 0.03 (0.03, 0.04) 1.7
Oragwa et al. (2017) 0.09 (0.08, 0.09) 1.7
Kachalla et al. (2016) 0.17 (0.12, 0.23) 1.2
Kwaghe et al. (2015) 0.06 (0.05, 0.07) 1.7
Alaku & Moruppa (1993) 0.04 (0.04, 0.04) 1.7
High subgroup 0.08 (0.07, 0.09) 84.3
Q=32081.69, p=0.00, I2=100%
Low
Okeke et al. (2016) 0.09 (0.09, 0.09) 1.7
Oyekunle & Talabi (2013) 0.00 (0.00, 0.00) 1.7
Cadmus et al. (2006) 0.10 (0.06, 0.15) 1.2
Ejeh et al. (2014a) 0.02 (0.02, 0.02) 1.7
Saidu et al. (2017) 0.01 (0.01, 0.01) 1.7
Adesokan et al. (2019b)o 0.15 (0.12, 0.18) 1.5
Adesokan et al. (2019b)e 0.02 (0.01, 0.03) 1.4
Adesokan et al. (2019b)s 0.01 (0.01, 0.03) 1.5
Hena et al. (2012) 0.05 (0.03, 0.07) 1.5
Danbirni et al. (2015) 0.08 (0.07, 0.09) 1.7
Low subgroup 0.04 (0.02, 0.07) 15.7
Q=8260.17, p=0.00, I2=100%
Overall 0.08 (0.07, 0.08) 100.0
Q=41077.72, p=0.00, I2=100%
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Prevalence