

Title: Associations between *Escherichia coli* isolate antimicrobial resistance and antimicrobial usage

Data Filename: PLOS ASSOCIATION DATASET.22OCT2015.xls

Data File Description: Data were collected as part of a study on antimicrobial resistance among isolates of *Escherichia coli* collected from beef feedlot cattle. Data in this data file include antibiotic resistance data for each individual isolate matched to pen-level antimicrobial use data. Resistance data is coded as 0/1 for 19 different antimicrobial drugs, sorted by assay (disk diffusion and/or broth microdilution). Antimicrobial use data is presented in units of animal defined daily dose. A key to the data is provided as the second tab in the Excel file.

Related Data Files: *Escherichia coli* individual antimicrobial resistance prevalences - PLOS\_ecindividualprev.22OCT2015.xls

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Date of Data Collection: cattle enrolled in study September 2007-January 2010

Geographic location: *Escherichia coli* was isolated from the feces of beef cattle located on four commercial feedlots in Alberta, Canada

Data File Created: 20151022

Methods: *Escherichia coli* was isolated from the feces of beef cattle from four commercial feedlots in Alberta, Canada. A total of 2,725 isolates were collected from 923 individuals. Antibiotic susceptibility of these isolates to 19 different antimicrobial drugs was determined by broth microdilution and/or disk diffusion assay. Antimicrobial use data was recorded for each feedlot, and associations between antimicrobial resistance and antimicrobial use were determined (see Table 5 in associated publication).

Antimicrobial resistance and usage data used to determine associations are reported in this database. See associated publication for additional methodological details.

Recommended Citation: Antimicrobial resistance in *Escherichia coli* recovered from feedlot cattle and associations with antimicrobial use. Katharine M. Benedict, Sheryl P. Gow, Tim A. McAllister, Calvin W. Booker, Sherry J. Hannon, Sylvia L. Checkley, Noelle R. Noyes, and Paul S. Morley. In review at PLoS One.

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