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| **Eligibility Criteria** | **Details** | **Justification** |
| English | The report was available in English | The reviewer was only proficient in English. To avoid inclusion of misinterpreted data, which was easy because the data was not in a standardized format. |
| Full Report | The researchers could access a full report of the data. An exception was made include data from reviews. | The goal of this review was to get as much information as possible on the results, methods and other factors that may have affected the results of the study |
| Rooftop Animal | Animals that could access rooftop. The definition was as inclusive as possible and included animals that could access rooftops but rarely do so. Ex. Brown bear. | The focus of the study was on feces that could directly contaminate rainwater collected from rooftops. The study definition was inclusive due to concerns about the limited number of reports. |
| Pathogens | For initial screening all pathogens were included. | The goal of the initial screening was to capture as much data as possible. |
| For the meta-analysis the pathogens included were *Coliform*, *Escherichia coli*, *Enterococci*, *Salmonella*, *Cryptosporidium*, *Giardia*, and *Campylobacter* | During meta-analysis the pathogens with the largest number of studies were chosen. These pathogens are also commonly tested in drinking water. |
| Lab Animal | Lab animals are animals that were tested under lab conditions. Animals caught in the wild and in a lab for less than 6 months were still included | Lab animals are often under different conditions that those in the wild and are exposed to pathogens through different routes. Also some lab animals are bred or genetically modified to have different characteristics than animals found in the wild. |
| Captive Animals | Captive animals are animals that have their access artificially limited so that they cannot reach rooftops. Ex. Chickens were assumed to not be able to reach rooftops unless they were noted as free range. | Captive animals were excluded because they would not be representative of rooftop animal feces. It was also assumed that rooves that housed captive animals were not used for rainwater harvesting. |
| Small sample size | Reports that contained a small sample size for an animal species. Including studies that used non species specific capture method that caught may animals in total but few of a specific species. | Small sample size data was included since it data for some species was rare. The data could still contribute to larger animal groups on the genus/order/class scale. There was little enumerated data. |
| Epidemics | Reports that collected results during an epidemic for the animal that was being studied. | Results from epidemics were included to represent the worst case scenario and to be more conservative when using this data to model health risk. |
| Infected Animals | Reports that only collected results on infected animals. This does not include studies that randomly captured a set of animals that were all infected; this often happened with pathogens that have high prevalence like *Coliform* bacteria. | Infected animal reports were only included for fecal pathogen concentrations but not for the prevalence of the pathogen in an animal population.. |
| Feces | Excreted feces as well as the contentions of the lower gastrointestinal track (intestines, cloacal swab, cloacal levage, rectal swab, and caecum) | Fecal samples were included. It was assumed that the contents of the gastrointestinal tract would eventually be excreted out so would have similar pathogen concentrations to excreted feces. |
| Non-fecal mediums | Tissue samples from the, intestines duodenum, cloaca, colon, whole body, egg. | Non-fecal mediums were only included to represent the presence of the pathogen in an animal population. It was assumed that infected animals would also be shedding pathogens in their feces. Samples from eggs were not included since eggs were not actively excreting feces. |
| Isolates | An individual bacteria, bacterial colony or genetic material taken from a fecal sample. Multiple isolates can be taken from the same fecal sample. | Studies of isolates were only included if the isolate could be traced back to the individual animal the isolate came from. Otherwise, isolate studies were not included because the number of animals infected by the pathogen could not be determined. |
| Presence/Absence | The presence/absence is the ratio of the infected animals to the total number of animals. Infected animals are animals that have pathogen concentrations over the limit of detection for a test and give a positive result. | Presence/absence data was included in the study because it was a standardized format that could be used to compare to other studies. |
| Enumerated | Measures of the concentration of pathogens in a sample. | Enumerated data was included in the study because it was a way to quantify the concentration of pathogens in fecal material. Enumerated data was only included if it was a format that could be translated in to log normal distribution parameters. If there was not enough data to determine log normal parameters then the enumerated data was excluded. |
| Other data | Results that were not presence/absence or enumerated. | Other types of data were included in the initial screening of the data to be as inclusive as possible and to see if there were any other factors affecting the quality of rainwater quality. For the meta-analysis the other types of data were not used because these types of data could not be standardized or these factors were rarely documented in reports. |
| Methods | The report had a method section which described how the pathogen prevalence or enumeration was conducted. | Data was excluded from primary sources that did not include methods for how the data was collected. Data without method were included if the data was from a review article because it was assumed that the data had been vetted by the review article authors. |