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| --- |
| **Previous outbreaks involving fresh produce.**  The table below provides information on significant food safety outbreaks that have occurred globally, mostly within the last 20 years.  The list is intended to be used as reference material which can form the basis of any decision as to whether the crop being assessed has a history of causing foodborne illness. It is recommended that if a crop has an entry in the table below, it should be considered as having a prior history of causing foodborne illness.  It is important to note that when foodborne illness outbreaks are investigated, it is common for no contaminated food to be unequivocally identified.  More often than not, an ***association*** is made with a particular type of fresh produce.  It is difficult to prove direct cause as fresh produce can have a shelf life that is shorter than the incubation period of the illness. Thus, when an outbreak occurs, there is no longer a sample of produce available for testing.  The notable exceptions are frozen berries, which partly explains their high profile in the list below.  The product column in the table below lists the most likely source of an outbreak as decided by the outbreak investigators. Where the infectious agent is a virus such as norovirus or hepatitis, the primary contamination source is likely to be an infected human that has handled the produce. It is rare, but not unheard of, for viruses to cross infect between species. |

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| --- | --- | --- | --- | --- |
| **Product** | **Produce origin** | **Outbreak country** | **Organism (year)** | **Reference** |
| Açaí juice | Brazil | Brazil | *Trypanosoma cruzi* (2004) | Pereira et al. 2009 |
| Açaí juice | Brazil | Brazil | *Trypanosoma cruzi* (2007) | Pereira et al. 2009 |
| Almond | United States | Canada, United States | *Salmonella* Enteritidis PT 30 (2000-01) | Isaacs et al. 2005 |
| Almond | United States | Canada, United States | *Salmonella* Enteritidis (2003)) | Cited by Machado-Moreira et al. 2019 |
| Almond | United States | Sweden | *Salmonella* Enteritidis NT3+ (2005-06) | Isaacs et al. 2005; Ledet et al. 2007 |
| Apple | United States | United States | *Listeria monocytogenes* (2014-15) | CDC 2015d |
| Apple juice | France | France | *Salmonella* Typhi | Paquet 1923 |
| Apple juice | Not reported | Canada | *Escherichia. coli* O157:H7 (1980) | Steel et al. 1982 |
| Apple juice | United States | United States | *Escherichia coli* O157:H7 (1991) | Besser et al. 1993; FDA 2001 |
| Apple juice | United States | United States | *Escherichia coli* O157:H7 (1996a) | Cody et al. 1999; CDC 1997 |
| Apple juice | United States | Canada, United States | *Escherichia coli* O157:H7 (1996b) | FDA 2001 |
| Apple juice | United States | United States | *Escherichia coli* O157:H7 (1996c) | FDA 2001 |
| Apple juice | United States | United States | *Escherichia coli* O157:H7 (1996d) | FDA 2001 |
| Apple juice | Canada | Canada | *Escherichia coli* O157:H7 (1998) | Tamblyn et al. 1999; FDA 2001 |
| Apple juice | United States | United States | *Cryptosporidium* spp.(1993) | Millard et al. 1994; FDA 2001 |
| Apple juice | United States | United States | *Cryptosporidium parvum* (1996) | CDC 1997; FDA 2001 |
| Apple juice | United States | United States | *Cryptosporidium parvum* (2003) | Cited by Vojdani et al. 2008 |
| Apple juice | United States | United States | *Escherichia coli* O157:H7 and *Cryptosporidium parvum* (2004) | Cited by Vojdani et al. 2008 |
| Apple juice | United States | United States | *Salmonella* Typhimurium | CDC 1975 |
| Avocado | Unknown | United States | Norovirus | CDC 2000 |
| Avocado | Unknown | United States | *Campylobacter jejuni* | CDC 2002 |
| Avocado | Unknown | United States | Hepatitis A | CDC 2005 |
| Basil | United States | United States | *Cyclospora cayatenansis* (1997) | Cited by Machado-Moreira et al. 2019; cited by Hadjilouka and Tsaltas 2020 |
| Basil | Mexico or United States | United States | *Cyclospora* (1999a, 1999b) | Cited by Machado-Moreira et al. 2019; cited by Hadjilouka and Tsaltas 2020 |
| Basil, thai | Thailand | Canada | *Cyclospora cayatenansis* (2001a) | Hoang et al. 2005; cited by Hadjilouka and Tsaltas 2020 |
| Basil, thai | Vietnam | Canada | *Cyclospora* (2001b) | Hoang et al. 2005; cited by Hadjilouka and Tsaltas 2020 |
| Basil | Imported | Canada | *Cyclospora cayatenansis* (2003a) | Cited by Kozak et al. 2013 |
| Basil | United States | Canada | *Cyclospora cayatenansis* (2003b) | Cited by Kozak et al. 2013 |
| Basil | United States | United States | *Cyclospora cayatenansis* (2004) | CDC 2018a |
| Basil | Peru or Costa Rica | Canada, United States | *Cyclospora cayatenansis* (2005a) | CDC 2018a; cited by Hadjilouka and Tsaltas 2020 |
| Basil | Mexico | Canada, United States | *Cyclospora cayatenansis* (2005b) | Cited by Hadjilouka and Tsaltas 2020 |
| Basil | Mexico | Canada | *Cyclospora cayatenansis* (2007) | Cited by Hadjilouka and Tsaltas 2020 |
| Basil | Israel | Denmark | *Salmonella* Anatum and toxigenic *Escherichia coli* (2006) | Pakalniskiene et al 2009 |
| Basil | Israel | United Kingdom, Denmark, Netherlands, United States | *Salmonella* Senftenberg (2007) | Pezzoli et al. 2008, cited by Hanning et al. 2009 |
| Basil | Not reported | Canada | *Cyclospora cayatenansis* (2010-13) | Cited by Hadjilouka and Tsaltas 2020 |
| Basil | Not reported | United States | *Cyclospora maintenances* (2018) | Cited by Hadjilouka and Tsaltas 2020 |
| Basil | Mexico | United States | *Cyclospora cayatenansis* (2019) | Cited by Hadjilouka and Tsaltas 2020 |
| Basil, pesto | Not reported | Norway | *Shigella sonnei* | Guzman-Herrador et al 2013 |
| Bean, green or beet, green | Unknown | Italy | *Escherichia coli* O196 (2012) | Cited by Machado-Moreira et al. 2019 |
| Berries, blueberries | New Zealand | New Zealand | Hepatitis A (2002) | Calder et al. 2003; Cited by Bozkurt et al. 2021 |
| Berries, blueberries | United States | United States | *Salmonella* Newport (2010) | Miller et al. 2013 |
| Berries, blackberries | Guatemala | Canada | *Cyclospora* (1999) | Cited by Hadjilouka and Tsaltas 2020 |
| Berries, blueberries, frozen | Not reported | Germany | Norovirus (2005) | Fell et al. 2007 |
| Berries, blackberries, fresh | United States | United States | Hepatitis A (2019) | FDA 2019c |
| Berries, blackberries, frozen | Poland | Germany | Norovirus (2005) | Cited by Bozkurt et al. 2021 |
| Berries, cranberries | Not reported | USA | Norovirus (2014) | Cited by Bozkurt et al. 2021 |
| Berries, raspberries | Guatemala | United States | *Cyclospora* (1995a, 1995b) | Herwaldt et al. 1997; Cited by Sivapalasingam et al. 2004; Cited by Machado-Moreira et al. 2019 |
| Berries, raspberries | Unknown | United States | *Cyclospora* *cayatenansis* (1996) | Cited by Sivapalasingam et al. 2004 |
| Berries, raspberries | Guatemala | Canada, United States | *Cyclospora* *cayetanensis* (1997) | Cited by Sivapalasingam et al. 2004; cited by Hadjilouka and Tsaltas 2020 |
| Berries, raspberries | Guatemala | Canada | *Cyclospora* *cayetanensis* (1998) | Cited by Hadjilouka and Tsaltas 2020 |
| Berries, raspberries | Bosnia | Canada | Norovirus (1997) | Gaulin et al. 1999 |
| Berries, raspberries | China | Sweden | Norovirus (2006) | Hjertqvist et al. 2006 |
| Berries, raspberries | Guatemala | United States | *Cyclospora* *cayetanensis* (2000a) | Ho et al. 2002 |
| Berries, raspberries | United Kingdom | United Kingdom | Hepatitis A | Ramsay and Upton 1989 |
| Berries, raspberries | United Kingdom | United Kingdom | Hepatitis A | Reid and Robinson 1987 |
| Berries, raspberries, frozen | Scotland | Scotland | Hepatitis A (1983) | Cited by Bozkurt et al. 2021 |
| Berries, raspberries, frozen | Scotland | Scotland | Hepatitis A (1988) | Cited by Bozkurt et al. 2021 |
| Berries, raspberries, frozen | Bulgaria | Netherlands | Hepatitis A (2016) | Cited by Bozkurt et al. 2021 |
| Berries, raspberries, frozen | Eastern Europe | Finland | Norovirus (1988) | Ponka et al. 1999; cited by Bozkurt et al. 2021 |
| Berries, raspberries, frozen | Serbia, Montenegro | Finland, Sweden | Norovirus (1998) | Tavoschi et al. 2015; cited by Bozkurt et al. 2021 |
| Berries, raspberries, frozen | Not reported | Sweden | Norovirus (2001) | Le Guyader et al. 2004; cited by Bozkurt et al. 2021 |
| Berries, raspberries, frozen | Serbia, Montenegro | Finland, Sweden | Norovirus (2003) | Tavoschi et al. 2015; cited by Bozkurt et al. 2021 |
| Berries, raspberries, frozen | Imported | France | Norovirus (2005) | Cotterelle et al. 2005; cited by Bozkurt et al. 2021 |
| Berries, raspberries, frozen | Poland | Denmark | Norovirus (2005a) | Falkenhorst et al. 2005; cited by Bozkurt et al. 2021 |
| Berries, raspberries, frozen | Poland | Denmark | Norovirus (2005b) | Korsager et al. 2005 |
| Berries, raspberries, frozen | Not reported | France | Norovirus (2005) | Cited by Bozkurt et al. 2021 |
| Berries, raspberries, frozen | China | Sweden | Norovirus (2006) | Cited by Bozkurt et al. 2021 |
| Berries, raspberries, frozen | Chile | Netherlands | Norovirus (2006) | Cited by Bozkurt et al. 2021 |
| Berries, raspberries, frozen | Serbia, Montenegro | Denmark | Norovirus (2006) | Cited by Tavoschi et al. 2015 |
| Berries, raspberries, frozen | Not reported | Netherlands | Norovirus (2006) | Cited by Tavoschi et al. 2015 |
| Berries, raspberries, frozen | Not reported | Denmark | Norovirus (2007) | Cited by Tavoschi et al. 2015; cited by Bozkurt et al. 2021 |
| Berries, raspberries, frozen | Poland | Finland | Norovirus (2009) | Cited by Bozkurt et al. 2021 |
| Berries, raspberries, frozen | Serbia, Bosnia, Herzegovina | Denmark, Sweden | Norovirus (2009-10) | Cited by Tavoschi et al. 2015 |
| Berries, raspberries, frozen | Not reported | Denmark | Norovirus (2010) | Cited by Bozkurt et al. 2021 |
| Berries, raspberries, frozen | Poland | Finland | Norovirus (2010) | Cited by Bozkurt et al. 2021 |
| Berries, raspberries, frozen | Poland | Sweden | Norovirus (2010) | Cited by Tavoschi et al. 2015 |
| Berries, raspberries, frozen | China | Denmark | Norovirus (2011) | Cited by Tavoschi et al. 2015 |
| Berries, raspberries, frozen | Serbia | Finland | Norovirus (2011) | Cited by Tavoschi et al. 2015 |
| Berries, raspberries, frozen | Serbia | Denmark | Norovirus (2011) | Cited by Tavoschi et al. 2015 |
| Berries, raspberries, frozen | Germany | Germany | Norovirus (2011) | Cited by Tavoschi et al. 2015 |
| Berries, raspberries, frozen | Poland | Finland | Norovirus (2013) | Cited by Tavoschi et al. 2015; cited by Bozkurt et al. 2021 |
| Berries, raspberries, frozen | Poland, Serbia | Denmark | Norovirus (2013) | Cited by Tavoschi et al. 2015; cited by Bozkurt et al. 2021 |
| Berries, raspberries, frozen | A country outside the EU | Norway | Norovirus (2013) | Einoder-Moreno et al. 2016 |
| Berries, raspberries, frozen | Not reported | United States | Norovirus (2016) | Cited by Bozkurt et al. 2021 |
| Berries, raspberries, frozen | China | Canada | Norovirus (2017) | Cited by Bozkurt et al. 2021 |
| Berries, raspberries, frozen | Sweden | Serbia | Norovirus (2017) | Cited by Bozkurt et al. 2021 |
| Berries, raspberries, juice | Guatemala | Spain | *Cyclospora* *cayatenansis* (2003-04) | Cited by Hadjilouka and Tsaltas 2020 |
| Berries, blackberries or raspberries | Guatemala | United States | *Cyclospora* *cayatenansis* (2000) | Cited by Hadjilouka and Tsaltas 2020 |
| Berries, blackberries or raspberries | Not reported | United States | *Cyclospora* *cayatenansis* (2008) | Cited by Hadjilouka and Tsaltas 2020 |
| Berries, redcurrant | Poland | Italy | Hepatitis A | Terio et al 2015 |
| Berries, strawberries | Unknown | Denmark, Finland, Norway, Sweden | Hepatitis A (2012-13a) | Nordic outbreak investigation team, 2013 |
| Berries, strawberries, fresh | Not reported | United States | Hepatitis A (1998) | Cited by Bozkurt et al. 2021 |
| Berries, strawberries, fresh | Not reported | United States | Hepatitis A (2000) | Cited by Bozkurt et al. 2021 |
| Berries, strawberries, fresh | Not reported | United States | Hepatitis A (2007) | Cited by Bozkurt et al. 2021 |
| Berries, strawberries, fresh | Not reported | United States | Hepatitis A (2013) | Cited by Bozkurt et al. 2021 |
| Berries, strawberries, fresh | United States | United States | *Staphylococcus aureus* (1985) | Cited by Sivapalasingam et al. 2004 |
| Berries, strawberries, fresh | Not reported | United States | Norovirus (1998) | Cited by Bozkurt et al. 2021 |
| Berries, strawberries, fresh | Not reported | United States | Norovirus (1999) | Cited by Bozkurt et al. 2021 |
| Berries, strawberries, fresh | Not reported | United States | Norovirus (2000) | Cited by Bozkurt et al. 2021 |
| Berries, strawberries, fresh | Not reported | United States | Norovirus (2002) | Cited by Bozkurt et al. 2021 |
| Berries, strawberries, fresh | Not reported | United States | Norovirus (2004) | Cited by Bozkurt et al. 2021 |
| Berries, strawberries, fresh | Not reported | United States | Norovirus (2005a, 2005b) | Cited by Bozkurt et al. 2021 |
| Berries, strawberries, fresh | Not reported | United States | Norovirus (2007a, 2007b) | Cited by Bozkurt et al. 2021 |
| Berries, strawberries, fresh | Not reported | United States | Norovirus (2012) | Cited by Bozkurt et al. 2021 |
| Berries, strawberries, fresh and frozen | United States | United States | *Escherichia coli* O157:H7 (2011) | Laidler et al. 2013 |
| Berries, strawberries, frozen | Mexico | United States | Hepatitis A (1990) | Cited by Sivapalasingam et al. 2004 |
| Berries, strawberries, frozen | United States | United States | Hepatitis A (1990) | Cited by Bozkurt et al. 2021 |
| Berries, strawberries, frozen | Mexico | United States | Hepatitis A (1997) | Hutin et al. 1999 |
| Berries, strawberries, frozen | China | Belgium | Hepatitis A (2012) | Cited by Tavoschi et al. 2015; Cited by Bozkurt et al. 2021 |
| Berries, strawberries, frozen | Egypt, Morocco | Finland, Denmark, Sweden, Norway | Hepatitis A (2012-13b) | Cited by Tavoschi et al. 2015; Cited by Bozkurt et al. 2021 |
| Berries, strawberries, frozen | China | Australia, New Zealand | Hepatitis A (2015-17) | Anon, 2017 |
| Berries, strawberries, frozen | Not reported | United States | Hepatitis A (2016) | Cited by Murray et al. 2017 |
| Berries, strawberries, frozen | Egypt | United States | Hepatitis A (2016) | Cited by Bozkurt et al. 2021 |
| Berries, strawberries, frozen | Poland | Sweden | Hepatitis A (2018) | Cited by Bozkurt et al. 2021 |
| Berries, strawberries, frozen | China | Germany | Norovirus, (2012) | Bernard et al. 2014, Maede et al 2012 |
| Berries, blueberry and strawberry | Not reported | United States | Norovirus, (2014) | Cited by Bozkurt et al. 2021 |
| Berries, raspberries, or blackberries | Not reported | United States | *Cyclospora* spp. (2000) | CDC 2018a |
| Berries, mixed, frozen | Egypt | Canada | Hepatitis A (2012) | Cited by Bozkurt et al. 2021 |
| Berries, mixed, frozen | Poland, Bulgaria, Canada, Serbia | Italy | Hepatitis A (2013) | Scavia et al. 2017; Cited by Bozkurt et al. 2021 |
| Berries, mixed, frozen | Chile, Argentina, Turkey | United States | Hepatitis A (2013) | Cited by Bozkurt et al. 2021 |
| Berries, mixed, frozen | Poland, Bulgaria | Austria, Bulgaria, France, Germany, Italy, Ireland, Netherlands, Norway, Poland, United Kingdom | Hepatitis A (2013-14) | Severi et al 2015; Cited by Tavoschi et al. 2015 |
| Berries, mixed, frozen | Germany | Norway | Hepatitis A (2014) | Cited by Bozkurt et al. 2021 |
| Berries, mixed, frozen | China | New Zealand | Hepatitis A (2015) | Cited by Bozkurt et al. 2021 |
| Berries, mixed, frozen | China, Chile | Australia | Hepatitis A (2015) | Cited by Bozkurt et al. 2021 |
| Berries, mixed, frozen | China | Australia | Hepatitis A (2017) | Cited by Bozkurt et al. 2021 |
| Berries, mixed, frozen | China | Australia | Hepatitis A (2018) | Cited by Bozkurt et al. 2021 |
| bBroccoli | Unknown | Japan | *Salmonella* Enteritidis | Sato et al. 2012 |
| Broccoli, powdered, seasoning mix | United States | United States | *Salmonella* Wandsworth | Cited by Machado-Moreira et al. 2019 |
| Broccoli, powdered, seasoning mix | United States | United States | *Salmonella* Typhimurium | Cited by Machado-Moreira et al. 2019 |
| Cabbage, salad | United States | United States | *Clostridium botulinum* (1987) | Cited by Machado-Moreira et al. 2019 |
| Cabbage | United States | United States | *Escherichia coli* O157 | Cited by Erickson 2010 |
| Cabbage | Peru | Peru | *Vibrio cholera* | Swerdlow et al. 1992 |
| Cabbage | United States | United States | *Escherichia coli* O111 | Cited by Carstens et al. 2019 |
| Cabbage, component of coleslaw | Canada | Canada | *Listeria monocytogenes* (1981d) | Schlech et al. 1983; cited by Machado-Moreira et al. 2019 |
| Cabbage or radish | Unknown | Korea | *Escherichia coli* O169 (2012) | Cho et al 2014 |
| Carrot | United States | United States | *Toxigenic Escherichia coli* (1993) | Cited by Islam et al. 2005 |
| Carrot | Unknown | United States | *Salmonella* Braenderup (1990) | CDC 1990 |
| Carrot | Unknown | United Kingdom | Norovirus | Anon 2005 |
| Carrot | Not determined | Poland | Norovirus (2002) | Kamińska et al. 2014 |
| Carrot | Finland | Finland | *Yersinia pseudotuberculosis* (2003) | Jalava et al. 2006 |
| Carrot | United States | United States | *Salmonella* Typhimurium (2005) | CDC 2005 |
| Carrot | United States | United States | *Cryptosporidium hominis* (2005) | Cited by Machado-Moreira et al. 2019 |
| Carrot | Finland | Finland | *Yersinia pseudotuberculosis* (2006) | Rimhanen-Finne et al. 2009 |
| Carrot | United States | United States | *Salmonella* spp. | Cited by Erickson 2010 |
| Carrot | United States | Japan, Samoa United, States | *Shigella sonnei* (2004) | Gaynor et al. 2009 |
| Carrot | Not reported | Canada | *Shigella sonnei* (2007) | Kozak et al. 2013; Cited by Machado-Moreira et al. 2019 |
| Carrot juice | United States | United States | *Clostridium botulinum* (1993) | Cited by Buzby and Crutchfield, 1999 |
| Celery | United States | United States | Norovirus (1991) | Warner et al. 1991; Cited by Erickson 2010; Cited by Machado-Moreira et al. 2019 |
| Celery | Contamination source was United States processing plant | United States | *Listeria monocytogenes* serovar 1/2a (2010) | Gaul et al. 2013 |
| Coconut, frozen, vacuum packed, pre-cut | Indonesia | Canada, United States | *Salmonella* Chailey (2017) | Luna et al. 2018 |
| Coconut, frozen and shredded | Vietnam | United States | *Salmonella* Newport (2018) | CDC 2018b |
| Coconut milk | Thailand | United States | *Vibrio cholerae* (1991) | Taylor et al. 1993 |
| Coriander (Cilantro) | Unknown | United States | *Salmonella* Thompson (1999) | Cited by Hanning et al 2009 |
| Coriander (Cilantro) | Unknown | United States | *Salmonella* Thompson | Campbell et al. 2001 |
| Coriander (Cilantro) | Not reported | Canada | *Cyclospora* *cayetanensis* (2003) | Cited by Kozak et al. 2009; cited by Hadjilouka and Tsaltas 2020 |
| Coriander (Cilantro) | Not reported | Canada | *Cyclospora* *cayetanensis* (2004) | Cited by Kozak et al. 2009; cited by Hadjilouka and Tsaltas 2020 |
| Coriander (Cilantro) | Unknown | United Kingdom | *Salmonella* TyphimuriumDT170 | Anon 2005 |
| Coriander (Cilantro) | Mexico | United States | *Cyclospora* *cayetanensis* (2013) | CDC 2018b; cited by Hadjilouka and Tsaltas, 2020 |
| Coriander (Cilantro) | Mexico | United States | *Cyclospora* *cayetanensis* (2014) | CDC 2018b; cited by Machado-Moreira et al. 2019; cited by Hadjilouka and Tsaltas, 2020 |
| Coriander (Cilantro) | Mexico | United States | *Cyclospora* *cayetanensis* (2015) | CDC 2018b; cited by Hadjilouka and Tsaltas, 2020 |
| Coriander (Cilantro) | Not reported | United States | *Cyclospora* *cayetanensis* (2018) | Cited by Hadjilouka and Tsaltas, 2020 |
| Cucumber | Belgium | France, United Kingdom | *Escherichia coli* O157:H7 (2002) | Duffell et al. 2003 |
| Cucumber | United States and Mexico | United States | *Salmonella* Newport (2012, 2015) | CDC 2015c; Cited by Murray et al. 2017 |
| Cucumber | United States | United States | *Salmonella* spp. (2013a) | Wadamori et al. 2017; Cited by Machado-Moreira et al. 2019 |
| Cucumber | United States | United States | *Escherichia coli* O157 (2013) | Cited by Machado-Moreira et al. 2019 |
| Cucumber | United States | United States | *Salmonella* Newport (2014) | Angelo et al. 2015 |
| Cucumber | United States and Mexico | United States | *Salmonella* Poona (2015) | CDC 2015b; Cited by Murray et al. 2017 |
| Cucumber | Spain | Denmark, Finland, Germany, Ireland, United Kingdom | *Salmonella* Agona(2014-16) | EFSA 2018 |
| Cucumber, Persian | Canada or Mexico or the Dominican Republic | United States | *Salmonella* Oslo (2016) | Bottichio et al. 2016 |
| Cucumber, salad | United States | United States | *Escherichia coli* O159, *Escherichia coli* O6, *Escherichia coli* O27 | Cited by Machado-Moreira et al. 2019 |
| Fruit, mixed, cut, salad | United States | United States | *Giardia intestinalis* (1986) | Porter et al. 1990 |
| Fruit, mixed, cut, salad | Not reported | United States | *Cyclospora* (1998) | Cited by Hadjilouka and Tsaltas 2020 |
| Fruit, mixed, cut, salad | Not reported | United States | *Salmonella* Javiana (2019-20) | CDC 2019c |
| Grape | United States | United States | *Escherichia coli* O157:H7 | Cited by Carstens et al. 2019 |
| Guava juice | Venezuela | Venezuela | *Trypanosoma cruzi* (2007) | Alarcón de Noya et al. 2010 |
| Hazelnut | United States | United States | *Escherichia coli* O157:H7 (2011) | CDC 2011 |
| Kratom | Not reported | United States | *Salmonella* Heidelberg, *Salmonella* Javiana, *Salmonella* Okatie, *Salmonella* Weltevreden, *Salmonella* Thompson | CDC 2018e |
| Leek or potato | United Kingdom | United Kingdom | *Escherichia coli* O157 (2010-11) | Launders et al. 2016 |
| Lettuce | Unknown | United Kingdom | *Campylobacter* | Anon 2005 |
| Lettuce | United States | United States | *Cyclospora cayatenansis* (2013) | Cited by Machado-Moreira et al. 2019 |
| Lettuce | United States | United States | *Escherichia coli* O157:H7 (1995) | Ackers et al. 1998 |
| Lettuce | United States | United States | *Escherichia coli* O157:H7 (1996) | Cited by Sivapalasingam et al. 2004 |
| Lettuce | Sweden | Sweden | *Escherichia coli* O157:H7 (1997, 2005) | Cited by Kintz et al. 2009; Söderström et al. 2007 |
| Lettuce | Netherlands | Netherlands, Iceland | *Escherichia coli* O157 | Friesema et al. 2008 |
| Lettuce | United States | United States | *Escherichia coli* O145 (2010) | Taylor et al. 2013 |
| Lettuce | United States | United States | *Escherichia coli* O157:H7 (2011) | Cited by Carstens et al. 2019 |
| Lettuce | United States | United States | *Escherichia coli* O26 (2013) | Cited by Carstens et al. 2019 |
| Lettuce | United Kingdom | United Kingdom | *Escherichia coli O96*:H19(2014) | Newitt et al. 2016 |
| Lettuce | United States | United States | *Escherichia coli* O157:H7 (2014) | Cited by Carstens et al. 2019 |
| Lettuce | United States | United States | *Giardia* (1981) | Cited by Sivapalasingam et al. 2004 |
| Lettuce | United States | United States | Hepatitis A (1986) | Cited by Harris et al. 2003; Cited by Machado-Moreira et al. 2019 |
| Lettuce | United States | United States | Hepatitis A (1988) | Cited by Sivapalasingam et al. 2004 |
| Lettuce | United States | United States | Hepatitis A (1990) | Cited by Sivapalasingam et al. 2004 |
| Lettuce | United States | United States | Norovirus (1981) | Cited by Sivapalasingam et al. 2004; Cited by Machado-Moreira et al. 2019 |
| Lettuce | United States | United States | Norovirus (1995) | Cited by Sivapalasingam et al. 2004 |
| Lettuce | France | Denmark | Norovirus (2010) | Ethelberg et al. 2010; Cited by Machado-Moreira et al. 2019 |
| Lettuce | United States | United States | *Salmonella* Heidelberg (1993) | Cited by Sivapalasingam et al. 2004 |
| Lettuce | United States | United States | *Salmonella* Thompson (1994) | Cited by Sivapalasingam et al. 2004 |
| Lettuce | Not reported | Norway | *Salmonella* Typhimurium DT4 (1994) | Cited by Machado-Moreira et al. 2019 |
| Lettuce | United States | United States | *Salmonella* Braenderup (1994) | Cited by Sivapalasingam et al. 2004 |
| Lettuce | Australia | Australia | *Salmonella* Anatum (2016) | Victoria State Government 2016 |
| Lettuce | Unknown | United Kingdom | *Salmonella* Typhimurium | Horby et al. 2003 |
| Lettuce | Unknown | Australia | *Salmonella* Bovismorbificans | Stafford et al. 2002 |
| Lettuce | Imported | Iceland | *Salmonella* Typhimurium | Cited by Machado-Moreira et al. 2019 |
| Lettuce | Imported | United Kingdom | *Salmonella* Newport | Cited by Sivapalasingam et al. 2004 |
| Lettuce | Unknown | United Kingdom | *Salmonella* Typhimurium | Cited by Machado-Moreira et al. 2019 |
| Lettuce | Unknown | United Kingdom | *Salmonella* Braenderup | Anon 2005 |
| Lettuce | Spain | Finland | *Salmonella* Typhimurium | Gillespie 2004; Takkinen et al. 2005 |
| Lettuce | Not reported | Spain | *Salmonella* Newport (2005) | Mercanoglu Taban et al. 2011; Cited by Machado-Moreira et al. 2019 |
| Lettuce, iceberg | Not reported | Norway, Sweden, United Kingdom | *Shigella sonnei* (1994) | Cited by Machado-Moreira et al. 2019 |
| Lettuce, iceberg | Imported | United States | *Escherichia coli* O157:H7 (1995a, 1995b) | Cited by Harris et al. 2003; Cited by Sivapalasingam et al. 2004 |
| Lettuce, iceberg | Not known | Canada | *Escherichia coli* O157 (1995) | Preston et al. 1997; Cited by Machado-Moreira et al. 2019 |
| Lettuce, iceberg | Canada | Canada | *Escherichia coli* O157:H7 (1996) | Cited by Kintz et al. 2019 |
| Lettuce, iceberg | Finland | Finland | *Yersinia pseudotuberculosis* O:3 (1998) | Nuorti et al. 2004 |
| Lettuce, iceberg, shredded | European country | Finland | *Salmonella* Newport, *Salmonella* Reading (2008) | Lienemann et al 2011; Cited by Machado-Moreira et al. 2019 |
| Lettuce, mesclun | United States | United States | *Cyclospora* (1997a, 1997b) | Cited by Sivapalasingam et al. 2004 |
| Lettuce, mesclun | United States | Canada, United States | *Listeria monocytogenes* (2011) | Cited by Zhu et al. 2017 |
| Lettuce, mesclun | United States | United States | *Escherichia coli* O157:H7 (1996) | Hilborn et al. 1999 |
| Lettuce, romaine | United States | United States | *Escherichia coli* O157:H7 (1995) | Cited by Harris et al. 2003 |
| Lettuce, romaine | United States | United States | *Escherichia coli* O145 (2010) | CDC 2010a |
| Lettuce, romaine | United States | United States | *Escherichia coli* O157:H7 (2011) | Cited by Carstens et al. 2019 |
| Lettuce, romaine | United States | United States | *Escherichia coli* O157:H7 (2012) | CDC 2012a; Cited by Murray et al. 2017; Cited by Carstens et al. 2019 |
| Lettuce, romaine | United States | United States | *Escherichia coli* O157:H7 (2013) | Cited by Carstens et al. 2019 |
| Lettuce, romaine | Mexico | United States | *Cyclospora cayatenansis* (2013-14) | Buss et al. 2016; Cited by Hadjilouka and Tsaltas, 2020 |
| Lettuce, romaine | Mexico | United States | *Salmonella* Enteritidis | Clark 2017 |
| Lettuce, romaine | United States | United States and Canada | *Escherichia coli* O157:H7 (2018-19) | FDA 2019b; cited by Kintz et al. 2019 |
| Lettuce, rucola | Italy | Norway, Sweden, United Kingdom | *Salmonella* Thompson (2005-06) | Nygård et al. 2008 |
| Lettuce, shredded | United States | United States | *Shigella sonnei* (1986) | Cited by Sivapalasingam et al. 2004 |
| Lettuce, shredded | Not reported | Netherlands, Iceland | *Escherichia coli* O157 (2007) | Cited by Machado-Moreira et al. 2019 |
| Lettuce, shredded | United States | United States | *Escherichia coli* O157:H7 (2013) | Cited by Murray et al. 2017 |
| Lettuce or onions | United States | United States | *Giardia intestinalis* (1989) | Cited by Harris et al. 2003 |
| Lettuce or mixed salad | Unknown | United Kingdom | *Salmonella* Enteritidis PT8 (2009) | Severi et al. 2012 |
| Lettuce, coriander, mint, green onion mix | China | China | *Salmonella* Paratyphi | Yan et al. 2015; Cited by Machado-Moreira et al. 2019 |
| Maize (sweetcorn) | Not reported | Italy | *Listeria monocytogenes* (1997) | Aureli et al 2000 |
| Maize, baby sweetcorn | Thailand | Australia, Denmark | *Shigella sonnei* (2007) | Lewis et al. 2009 |
| Mango | Brazil | United States | *Salmonella* Newport (1999) | Sivapalasingam et al. 2003 |
| Mango | United States | United States | *Salmonella* Saintpaul (2001) | Cited by Hanning et al. 2009 |
| Mango | United States | United States | *Salmonella* Saintpaul (2003) | Cited by Hanning et al. 2009 |
| Mango | United States | United States | *Salmonella* Braenderup (2012) | Cited by Murray et al. 2017 |
| Mamey, frozen, puree | Guatemala | United States | *Salmonella* Typhi (1998-99) | Katz et al. 2002; FDA 2010 |
| Mamey, frozen, pulp | Not reported | United States | *Salmonella* Typhi (2010) | CDC 2010b |
| Melon | United States | United States | Norovirus (1987a, 1987b) | Cited by Machado-Moreira et al. 2019 |
| Melon | Unknown | United Kingdom | Norovirus (1987) | Cited by Harris et al. 2003; Cited by Walsh et al 2014 |
| Melon | Australia | Australia | *Salmonella* | Cited by Walsh et al 2014 |
| Melon | Australia | Australia | *Salmonella* Hvittingfoss | Wadamori et al. 2017 |
| Melon | Morocco | Sweden | *Shigella sonnei* | Cited by Walsh et al 2014 |
| Melon | Mexico, Central America | United States | *Salmonella* Chester | Cited by Walsh et al 2014 |
| Melon | United States | United States | *Salmonella* Oranienburg | Cited by Walsh et al 2014 |
| Melon | United States | United States | *Salmonella* Miami | Cited by Walsh et al 2014 |
| Melon | Unknown | United States | *Escherichia coli* O157:H7 | Cited by Walsh et al 2014 |
| Melon | Mexico | United States | *Salmonella* Saphra | Mohle-Boetani et al. 1999 |
| Melon | Unknown | Australia | *Salmonella* Saintpaul | Munnoch et al. 2009 |
| Melon | Unknown | United Kingdom | *Salmonella* Newport (2006) | Cited by Hanning et al. 2009 |
| Melon | United States | United States | *Listeria monocytogenes* (2011) | McCollum et al. 2013 |
| Melon, cantaloupe | Not reported | United States | *Campylobacter jejuni* (1985) | Cited by Sivapalasingam et al. 2004 |
| Melon, cantaloupe | Not reported | United States | *Campylobacter jejuni* (1995) | Cited by Machado-Moreira et al. 2019 |
| Melon, cantaloupe | Not reported | United States | *Escherichia coli* O157:H7 (1993) | Cited by Harris et al. 2003 |
| Melon, cantaloupe | United States | United States | *Listeria monocytogenes* (2011) | McCollum et al. 2013; Cited by Walsh et al. 2014; cited by Murray et al. 2017 |
| Melon, cantaloupe | Not reported | United States | Norovirus (1999) | Bowen et al. 2006 |
| Melon, cantaloupe | Not reported | United States | Norovirus (2000) | Bowen et al. 2006 |
| Melon, cantaloupe | Not reported | United States | Norovirus (2003) | Bowen et al. 2006 |
| Melon, cantaloupe | Not reported | United States | *Salmonella* Saphra (1997) | Cited by Sivapalasingam et al. 2004 |
| Melon, cantaloupe | Guatemala, Mexico | United States | *Salmonella* Chester (1989) | Cited by Sivapalasingam et al. 2004; cited by Walsh et al. 2014 |
| Melon, cantaloupe | Mexico | United States | *Salmonella* Poona (2000) | Cited by Hanning et al 2009; cited by Walsh et al. 2014 |
| Melon, cantaloupe | Mexico | United States | *Salmonella* Poona (2001) | CDC 2002; Cited by Hanning et al 2009; cited by Walsh et al. 2014 |
| Melon, cantaloupe | Mexico | United States | *Salmonella* Anatum (2001) | Cited by Walsh et al. 2014 |
| Melon, cantaloupe | Mexico | United States | *Salmonella* Poona (2002) | Cited by Walsh et al. 2014 |
| Melon, cantaloupe | Not reported | United States | *Salmonella* Muenchen (2003) | Cited by Machado-Moreira et al. 2019 |
| Melon, cantaloupe | Honduras | United States | *Salmonella* Litchfield (2007) | Cited by Walsh et al. 2014 |
| Melon, cantaloupe | Not reported | United States | *Salmonella* Javiana(2008) | Cited by Walsh et al. 2014 |
| Melon, cantaloupe | Guatemala | United States | *Salmonella* Panama(2011) | Cited by Walsh et al. 2014; cited by Murray et al. 2017 |
| Melon, cantaloupe | United States | United States | *Salmonella* Uganda(2011) | Cited by Walsh et al. 2014 |
| Melon, cantaloupe | Not reported | United States | *Salmonella* Typhimurium, Newport (2012) | Cited by Murray et al. 2017 |
| Melon, honeydew | Central America | United States | *Salmonella* Newport (2003) | Cited by Hanning et al. 2009; cited by Walsh et al. 2014 |
| Melon, honeydew | Not reported | United States | *Salmonella* Litchfield (2007) | Cited by Hanning et al. 2009 |
| Melon, pre-cut | United States | United States | *Salmonella* Adelaide (2018) | CDC 2018c |
| Melon, pre-cut | United States | United States | *Salmonella* Carrau (2019) | CDC 2019a |
| Melon, rock | Not reported | Australia | *Salmonella Hvittingfoss* | Wadamori et al. 2017; Cited by Machado-Moreira et al. 2019 |
| Melon, water | Unknown | Sweden | *Shigella sonnei* (1987) | Cited by Machado-Moreira et al. 2019 |
| Melon, water | Unknown | United States | *Salmonella* Javiana (1991, 1993) | Cited by Walsh et al 2014 |
| Melon, water | Unknown | United States | *Salmonella* Oranienburg (1979) | Cited by Sivapalasingam et al. 2004 |
| Melon, water | Brazil | United Kingdom, Ireland, Germany | *Salmonella* Newport (2011-12) | Byrne et al. 2014 |
| Mushroom | Unknown | United States | *Salmonella* Typhimurium var Copenhagen (2002) | Cited by Hanning et al. 2009 |
| Mushroom | United States | United States | *Salmonella* Heidelberg (2003) | Cited by Hanning et al. 2009 |
| Mushroom, enoki | Korea | United States | *L. monocytogenes* (2020) | CDC 2020a |
| Mushroom, dried | Unknown | United Kingdom | *Bacillus cereus* | Anon 2005 |
| Mushroom, kikurage | China | United States | *Salmonella* Stanley | CDC 2020f |
| Onion, green | Mexico, United States | United States | Hepatitis A (1998) | Dentinger et al. 2001 |
| Onion, green | Mexico | United States | Hepatitis A (2003) | Wheeler et al. 2005 |
| Onion, green | Unknown | United States | *Cryptosporidium parvum* (1997) | Quinn et al. 1998; Cited by Machado-Moreira et al. 2019 |
| Onion, green | Mexico | United States | *Shigella flexneri* (1994) | Anon 2001; Cited by Machado-Moreira et al. 2019 |
| Onion, green | Not reported | United States | *Bacillus cereus* | Cited by Erickson 2010 |
| Onion, green | Not reported | United States | *Campylobacter jejuni* | Cited by Erickson 2010 |
| Onion, green | Unknown | United States | *Cyclospora* *cayetanensis* (2017) | CDC 2018a; cited by Hadjilouka and Tsaltas 2020 |
| Onion, red, white, yellow, and sweet yellow | United States | United States | *Salmonella* Newport (2020) | FDA 2020a; CDC 2020c |
| Onion, Spanish | Not reported | Canada | *Escherichia coli* O157:H7 (2009) | Cited by Kozak et al. 2013 |
| Orange juice | United States | United States | *Salmonella* Gaminera and Hartford (1995) | Cook et al. 1998 |
| Orange juice | South Africa | South Africa, United Kingdom | *Shigella flexneri* (1995) | Thurston et al. 1998 |
| Orange juice | United States | Canada, United States | *Salmonella* Muenchen (1999) | Anon 1999a |
| Orange juice | Australia | Australia | *Salmonella* Typhimurium (1999) | Anon 1999b |
| Orange juice | United States | United States | *Salmonella* Anatum (1999) | Krause et al. 2001 |
| Orange juice | United States | United States | *Salmonella* Typhimurium and Saintpaul (2005) | Jain et al. 2009 |
| Papaya | Australia | Australia | *Salmonella* Litchfield (2006-07) | Gibbs et al. 2009 |
| Papaya | Mexico | United States | *Salmonella* Agona (2011) | Cited by Murray et al. 2017; Mba-Jonas et al. 2018 |
| Papaya, maradol | Mexico | United States | *Salmonella* Kiambu, Thompson, Agona, Gaminara (2017a, 2017b, 2017c, 2017d) | CDC 2017, Cited by Murray et al. 2017 |
| Papaya, maradol | Mexico | United States | *Salmonella* Urbanda (2019) | FDA 2019a; Hassan et al. 2019 |
| Parsley | Mexico/California, United States | United States, Canada | *Shigella sonnei* (1998) | Crowe et al. 1999 |
| Peach, bagged | United States | United States | *Salmonella* Enteriditis (2020) | FDA 2020b; CDC 2020b |
| Pea | United States | United States | *Campylobacter jejuni* | Gardener et al. 2011 |
| Pea, snow | Guatemala | United States | *Cyclospora* (2004) | CDC 2018a; cited by Hadjilouka and Tsaltas 2020 |
| Pea, sugar snap | Guatemala | United States | *Cyclospora* (2008) | Cited by Hadjilouka and Tsaltas 2020 |
| Pea, sugar snap | Guatemala | Sweden | *Cyclospora* (2009) | Cited by Hadjilouka and Tsaltas 2020 |
| Pea, sugar snap | Kenya | Norway, Denmark | *Shigella dysenteriae*, *Shigella sonnei* (2009) | Muller et al. 2009 |
| Pepper, black | India | Canada | *Salmonella* Weltevreden (1973-74) | Cited by Van Doren et al. 2013 |
| Pepper, black | Brazil | Norway | *Salmonella* Senftenberg, *Salmonella* Lexington, *Salmonella* Abaetetuba (1982) | Cited by Van Doren et al. 2013 |
| Pepper, black | Unknown | United Kingdom | *Salmonella* Enteritidis PT4 (1996) | Cited by Van Doren et al. 2013 |
| Pepper, black, red | Vietnam, India, China | United States | *Salmonella* Montevideo (2009-10) | CDC, 2010, Gieraltowski et al 2013; Cited by Van Doren et al. 2013 |
| Pepper, hot | Mexico, United States | United States | *Salmonella* Anatum (2016) | Hassan et al. 2017 |
| Pepper, white | Vietnam | United States | *Salmonella* Rissen (2008-09) | Kennelly, 2010; Cited by Van Doren et al. 2013 |
| Pepper, white | Unknown | Denmark | *Bacillus cereus* | Cited by Van Doren et al. 2013 |
|  |
| Pepper, jalapeño | Mexico | United States | *Salmonella* Saintpaul (2008) | Mody et al. 2011 |  |
| Pepper, chilli | United States | United States | Sa*lmonella* Montevideo (2000) | Cited by Hanning et al. 2009 |  |
| Pepper, paprika | South America | Germany | Various *Salmonella* serovars (1993) | Lehmacher et al. 1995; cited by Van Doren et al. 2013 |  |
| Pepper, serrano | United States | United States | Sa*lmonella* Saintpaul (2008) | Cited by Hanning et al. 2009 |  |
| Pinenut | Not reported | United States | *Salmonella* Enteritidis (2011)) | Cited by Machado-Moreira et al. 2019 |  |
| Pomegranate seed | Turkey | United States | Hepatitis A (2013) | CDC 2013a |  |
| Potato | United States | United States | *Salmonella* Enteritidis (1991, 1998, 2004) | Cited by Hanning et al. 2009 |  |
| Potato (or leek) | United Kingdom | United Kingdom | *Escherichia coli* O157(2010-11) | Launders et al. 2016 |  |
| Radicchio rosso leaf (chicory) | Unnamed European country | Norway | *Yersinia enterocolitica* (2011) | MacDonald et al 2012 |  |
| Radish | Japan | Japan | *Escherichia coli* O157(1996) | Cited by Machado-Moreira et al. 2019 |  |
| Radish or cabbage | Unknown | Korea | *Escherichia coli* O169 (2012) | Cho et al 2014 |  |
| Rocket rucola, arugula | Unknown | United Kingdom | *Bacillus thuringiensis* | Anon 2005 |  |
| Rocket rucola, arugula | Unknown | Sweden | Hepatitis A (2001) | Nygard et al. 2001 |  |
| Rocket rucola, arugula | Italy | Norway | *Shigella flexneri* | Nygard et al. 2004 |  |
| Rocket rucola, arugula | Italy | Norway/Sweden | *Salmonella* Thompson | Nygard et al. 2004 |  |
| Rocket rucola, arugula | Denmark | Finland | *Escherichia coli* ONT:H11and *O111:H8* | Kinnula et al. 2018 |  |
| Salad, ready to eat | Not reported | Canada | *Campylobacter jejuni* (1984) | Cited by Harris et al. 2003; Cited by Machado-Moreira et al. 2019 |  |
| Salad, ready to eat | Not reported | United States | Hepatitis (1986) | Cited by Machado-Moreira et al. 2019 |  |
| Salad, ready to eat | Not reported | Canada | Calicivirus (1992) | Cited by Harris et al. 2003 |  |
| Salad, ready to eat | Not reported | United Kingdom | *Salmonella* Newport (2001) | Fisher and O’Brien 2001 |  |
| Salad, ready to eat | Not reported | Germany | *Cyclospora* (2000) | Cited by Machado-Moreira et al. 2019 |  |
| Salad, ready to eat | Not reported | Canada | *Cyclospora cayatenansis* (2001) | Cited by Machado-Moreira et al. 2019 |  |
| Salad, ready to eat | Not reported | United Kingdom | Norovirus (2007) | Showell et al. 2007 |  |
| Salad, ready to eat | Not reported | United States | *Cyclospora* (2004) | Cited by Machado-Moreira et al. 2019 |  |
| Salad, ready to eat | United States | United States | *Escherichia coli* O157:H7 (2003) | Cited by Kintz et al. 2019 |  |
| Salad, ready to eat | Not reported | Norway | *Yersinia enterocolitica* (2011) | McDonald et al. 2011; McDonald et al. 2012 |  |
| Salad, ready to eat | United States | United States | *Escherichia coli* O157:H7 (2013) | CDC 2013b |  |
| Salad, ready to eat | Switzerland | Switzerland | *Listeria monocytogenes* (2013-14) | Stephan et al. 2015 |  |
| Salad, ready to eat | Not reported | United Kingdom | *Cryptosporidium parvum* (2012) | McKerr et al. 2015 |  |
| Salad, ready to eat | Not reported | Finland | *Cryptosporidium parvum* (2012) | Cited by Machado-Moreira et al. 2019 |  |
| Salad, ready to eat | Mexico | United States | *Cyclospora* (2013) | CDC 2018a |  |
| Salad, ready to eat | United Kingdom | United Kingdom | *Salmonella* Singapore (2014) | Wadamori et al. 2017; Cited by Machado-Moreira et al. 2019 |  |
| Salad, ready to eat | United States | United States | *Escherichia coli* O145 (2015) | Cited by Carstens et al. 2019 |  |
| Salad, ready to eat | United Kingdom | United Kingdom | *Escherichia coli* O157:H7 (2015) | Mikhail et al. 2018 |  |
| Salad, ready to eat | United States | United States | *Listeria monocytogenes* (2016) | CDC 2016a; Cited by Murray et al. 2017; Cited by Machado-Moreira et al. 2019 |  |
| Salad, ready to eat | Imported | United Kingdom | *Escherichia coli* O157:H7 (2016) | Gobin et al. 2018 |  |
| Salad, lettuce, onion | United States | United States | *Giardia* (1989) | Cited by Machado-Moreira et al. 2019 |  |
| Salad, mixed | Italy, France, or Germany | Germany | *Cyclospora cayetanensis* (2000) | Döller et al. 2002; cited by Hadjilouka and Tsaltas 2020 |  |
|  |
| Salad, mixed | Not reported | Norway | *Yersinia enterocolitica* (2011) | MacDonald et al 2012; Cited by Machado-Moreira et al. 2019 |  |
| Salad, mixed | Not reported | Norway | *Yersinia enterocolitica* (2014) | MacDonald et al 2012; Cited by Machado-Moreira et al. 2019 |  |
| Salad, mixed | Not reported | Norway | *Salmonella* Coeln (2013) | Cited by Machado-Moreira et al. 2019 |  |
| Salad, mixed | United States | United States | *Cyclospora* (2018) | Cited by Hadjilouka and Tsaltas, 2020 |  |
| Salad, mixed | United States | United States | *Cyclospora* *cayetanensis* (2020) | FDA 2020c; cited by Hadjilouka and Tsaltas 2020 |  |
| Salad, mixed, chopped | United States | United States, Canada | *Escherichia coli* O157:H7 (2019) | CDC 2019b |  |
| Salad, mixed, leafy greens | Not reported | United States | *Escherichia coli* O157:H7 (2020) | CDC 2020e |  |
| Seaweed, green | South Korea | South Korea | Norovirus (2012) | Park et al. 2015 |  |
| Seed, mixed; anise, fennel, caraway | Turkey | Germany | *Salmonella* Agona (2002-03) | Koch et al. 2005; cited by Van Doren et al. 2013 |  |
| Seed, fennel | Not reported | Serbia | *Salmonella* Senftenberg (2007-08) | Cited by Van Doren et al. 2013 |  |
| Spinach | Canada | Canada | *Shigella sonnei* (2001) | Cited by Kozak et al. 2013 |  |
| Spinach | United States | United States | *Escherichia coli* O157:H7 (2006) | CDC 2006 |  |
| Spinach | United States | Canada | *Escherichia coli* O157:H7 (2006) | Cited by Kozak et al. 2013 |  |
| Spinach | United States | United States | *Escherichia coli* O157 (2006) | Grant et al. 2008 |  |
| Spinach | United States | United States | *Escherichia coli* O157:H7 | Wendel et al. 2009 |  |
| Spinach | United States | United States | *Escherichia coli* O157:NM H- (2012) | Cited by Carstens et al. 2019 |  |
| Spinach | United States | United States | *Escherichia coli* O157:H7 (2014) | Cited by Carstens et al. 2019 |  |
| Spinach | United States | United States | *Escherichia coli* O26 (2017) | Cited by Carstens et al. 2019 |  |
| Spinach | Not reported | Denmark, Sweden | *Yersinia enterocoliticaI* O3(2019) | Espenhain et al. 2019 |  |
| Spinach, baby | United Kingdom | United Kingdom | *Salmonella* Java | Cited by Iwu and Okoh 2019 |  |
| Spinach, bagged | United States | United States | *Escherichia coli* O157 (2006)) | Cited by Machado-Moreira et al. 2019 |  |
| Spinach and Spring mix | United States | United States | *Escherichia coli* O157:H7 (2012) | CDC 2012b; Cited by Murray et al. 2017 |  |
| Sprouted seeds, unspecified | United States | United States | *Listeria monocytogenes serovar* 1/2a (2008) | Garner and Kathariou, 2016 |  |
| Sprouted seeds, unspecified | Netherlands | Germany | *Salmonella* Newport (2011) | Bayer et al. 2014 |  |
| Sprouted seeds, unspecified | United States | United States | *Escherichia coli* O157:NM H- (2016) | Cited by Carstens et al. 2019 |  |
| Sprouted seeds, alfalfa | Canada | Canada | *Listeria monocytogenes* (1989) | Cited by Machado-Moreira et al. 2019 |  |
| Sprouted seeds, alfalfa | United States | United States | *Salmonella* Anatum (1990) | Cited by Sivapalasingam et al. 2004 |  |
| Sprouted seeds, alfalfa | Australia | Finland, Sweden | *Salmonella* Bovismorbificans (1995) | Cited by Machado-Moreira et al. 2019 |  |
| Sprouted seeds, alfalfa | Netherlands | United States, Canada, Finland | *Salmonella* Stanley (1995) | Cited by Sivapalasingam et al. 2004; Cited by Machado-Moreira et al. 2019 |  |
| Sprouted seeds, alfalfa | Not reported | United States, Canada, Denmark | *Salmonella* Newport (1995a, 1995b) | Cited by Sivapalasingam et al. 2004 |  |
| Sprouted seeds, alfalfa | United States | United States | *Escherichia coli* O157:H7 (1997) | Breuer et al. 2001 |  |
| Sprouted seeds, alfalfa | Not reported | United States | *Salmonella* Stanley (1996) | Cited by Machado-Moreira et al. 2019 |  |
| Sprouted seeds, alfalfa | Not reported | Canada | *Salmonella* Melefridis (1996) | Cited by Machado-Moreira et al. 2019 |  |
| Sprouted seeds, alfalfa | United States | United States | *Salmonella* Montevideo, *Salmonella* Melefridis (1996) | Taormina et al. 1999; Cited by Sivapalasingam et al. 2004 |  |
| Sprouted seeds, alfalfa | United States | United States | *Salmonella* Anatum, *Salmonella* Infantis (1997) | Taormina et al. 1999; Cited by Machado-Moreira et al. 2019 |  |
| Sprouted seeds, alfalfa | Not reported | Canada | *Salmonella* Melefridis (1997) | Cited by Machado-Moreira et al. 2019 |  |
| Sprouted seeds, alfalfa | United States | United States | *Salmonella* Seftenberg (1997-98) | Taormina et al. 1999 |  |
| Sprouted seeds, alfalfa | Australia | United States | *Salmonella* Kottbus (2001) | Winthrop et al. 2003; Cited by Machado-Moreira et al. 2019 |  |
| Sprouted seeds, alfalfa | Not reported | United States | *Salmonella* Saintpaul (2003) | Cited by Machado-Moreira et al. 2019 |  |
| Sprouted seeds, alfalfa | Not reported | United States | *Salmonella* Chester (2003) | Cited by Machado-Moreira et al. 2019 |  |
| Sprouted seeds, alfalfa | United States | United States | *Escherichia coli* O157 (2003) | Ferguson et al. 2005 |  |
| Sprouted seeds, alfalfa | Australia | Australia | *Salmonella* Oranienburg (2005)) | Cited by Machado-Moreira et al. 2019 |  |
| Sprouted seeds, alfalfa | Italy | Norway, Finland, Denmark | *Salmonella* Weltevreden (2007) | Emberland et al. 2007 |  |
| Sprouted seeds, alfalfa | United States | United States | *Escherichia coli* O157 (2016) | CDC 2016b |  |
| Sprouted seeds, alfalfa | Australia | Australia | *Salmonella* Havana (2018) | Harfield et al. 2019 |  |
| Sprouted seeds, bean | United States | United States | *Yersinia enterocolitica* (1982) | Cited by Sivapalasingam et al. 2004; Cited by Machado-Moreira et al. 2019 |  |
| Sprouted seeds, bean | United Kingdom | United Kingdom | *Salmonella* Bareilly (2010) | Cleary et al. 2010 |  |
| Sprouted seeds, bean | United States | United States | *Listeria monocytogenes* serovar 4b (2014) | Garner and Kathariou 2016 |  |
| Sprouted seeds, bean | United States | United States | *Salmonella* Enteriditis (2013) | Wadamori et al. 2017; Cited by Machado-Moreira et al. 2019 |  |
| Sprouted seeds, bean | United States | United States | *Salmonella* Enteriditis (2015) | CDC 2015a |  |
| Sprouted seeds, clover | United States | United States | *Escherichia coli* O26 (2012) | Cited by Luna-Guevara et al. 2019; Cited by Carstens et al. 2019 |  |
| Sprouted seeds, clover | United States | United States | *Escherichia coli* O121 (2013-14) | CDC 2014; Cited by Carstens et al. 2019 |  |
| Sprouted seeds, clover, red | United States | United States | *Escherichia coli* O103 (2020) | CDC 2020d |  |
| Sprouted seeds, cress | Not reported | United Kingdom | *Salmonella* Goldcoast (1989) | Taormina et al. 1999; Cited by Harris et al. 2003 |  |
| Sprouted seeds, fenugreek | Egypt | France, Germany | *Escherichia coli* O104:H4 (2011) | King et al. 2012 |  |
| Sprouted seeds, mixed; soy, cress, mustard | United States | United States | *Bacillus cereus* (1973) | Cited by Sivapalasingam et al. 2004 |  |
| Sprouted seeds, mung bean | Not reported | Sweden | *Salmonella* Saintpaul*, Salmonella* Havana*, Salmonella* Muenchen (1988) | Cited by Harris et al. 2003 |  |
| Sprouted seeds, mung bean | Australia | United Kingdom | *Salmonella* Saintpaul (1988) | O’Mahony et al. 1990 |  |
| Sprouted seeds, mung bean | Australia | United Kingdom | *Salmonella* Virchow (1988) | O’Mahony et al. 1990 |  |
| Sprouted seeds, mung bean | Netherlands | Netherlands | *Salmonella* Enteriditis (2000) | Van Duynhoven et al. 2002; Cited by Machado-Moreira et al. 2019 |  |
| Sprouted seeds, mung bean | United States | United States | *Salmonella* Enteriditis (2000) | Mohle-Boetani et al. 2009 |  |
| Sprouted seeds, mung bean | Not reported | Canada | *Salmonella* Enteriditis PT913 (2001) | Honish et al. 2001; Cited by Machado-Moreira et al. 2019 |  |
| Sprouted seeds, mung bean | United States | United States | *Salmonella* Enteriditis (2001a, 2001b) | Mohle-Boetani et al. 2009 |  |
| Sprouted seeds, mung bean | Not reported | Finland | *Salmonella* Abony (2002) | Cited by Machado-Moreira et al. 2019 |  |
| Sprouted seeds, mung bean | Not reported | Canada | *Salmonella* Enteriditis PT33 (2005) | Cited by Machado-Moreira et al. 2019 |  |
| Sprouted seeds, mung bean | United States | United States | *Salmonella* Braenderup (2006) | Cited by Machado-Moreira et al. 2019 |  |
| Sprouted seeds, mung bean | China, Myanmar | United Kingdom | *Salmonella* Bareilly (2010) | Cleary et al. 2010; Cited by Machado-Moreira et al. 2019 |  |
| Sprouted seeds, mung bean | United States | United States | *L. monocytogenes* (2014) | Garner and Kathariou 2016 |  |
| Sprouted seeds, onion | Canada | Canada | *Salmonella* Cubana (2009) | Cited by Kozak et al. 2013 |  |
| Sprouted seeds, white radish | Japan | Japan | *Escherichia coli* O157:H7 (1996) | Michino et al. 1999 |  |
| Stone fruit, mixed, (peach, nectarine) | Not reported | United States | *Listeria monocytogenes* (2014-16) | Chen et al. 2016 |  |
| Sweetcorn | Italy | Italy | *Listeria monocytogenes* | Twisselmann, 2000 |  |
| Sweetcorn, baby | Thailand | Denmark, Australia | *Shigella sonnei* | Lewis et al. 2009 |  |
| Sweetcorn | Hungary | Austria, Denmark, Finland, Sweden, United Kingdom | *Listeria monocytogenes* (2015-18) | McLaughlin *et al.*, 2021 |  |
| Tomato | United States | United States | *Salmonella* Montevideo (1993) | Cited by Machado-Moreira et al. 2019 |  |
| Tomato | United States | United States | *Salmonella* Javiana | Anon 2001 |  |
| Tomato | United States | United States | *Salmonella* Baildon (1998-99) | Anon 2001, Cited by Hanning et al. 2009 |  |
| Tomato | Unknown | United States | Hepatitis A | Anon 2001 |  |
| Tomato | Unknown | United States | *Salmonella* Thompson (2000) | Cited by Hanning et al 2009 |  |
| Tomato | United States | United States | *Shigella flexneri* (2001) | Reller et al. 2006 |  |
| Tomato | Unknown | Canada, United States | *Salmonella* Braenderup (2004) | CDC 2005a, cited by Hanning et al. 2009 |  |
| Tomato | Unknown | Canada, United States | *Salmonella* Braenderup (2005) | CDC 2007a, cited by Hanning et al. 2009 |  |
| Tomato | United States | United States | *Salmonella* Newport (2005) | Greene et al. 2008 |  |
| Tomato | Unknown | United States | *Salmonella* Javiana (2005) | Cited by Machado-Moreira et al. 2019 |  |
| Tomato | Unknown | United States | *Salmonella* Montevideo (2005) | Cited by Machado-Moreira et al. 2019 |  |
| Tomato | Unknown | United States | *Salmonella* Braenderup (2004) | Gupta et al. 2007 |  |
| Tomato | Not determined | Australia | Hepatitis A (2009) | Donnan et al. 2012 |  |
| Tomato | United States | United States | *Salmonella* Newport (2015) | Cited by Murray et al. 2017 |  |
| Tomato, datterino | Italy | Denmark, Germany, Italy, Austria, Belgium | *Salmonella* Strathcona (2011) | Müller et al. 2016 |  |
| Tomato, diced | Unknown | United States | Hepatitis A (1994) | Cited by Harris et al. 2003 |  |
| Tomato, semi-dried | France | France | Hepatitis A (2010) | Gallot et al. 2011 |  |
| Turmeric | Not reported | United Kingdom | *Bacillus subtilis, Bacillus pumilus* (1995) | Cited by Van Doren et al. 2013 |  |
| Vegetables, raw, mixed | Not reported | United States | *Listeria monocytogenes* (1979c) | Ho et al. 1986 |  |
| Vegetables, mixed (broccoli, cauliflower, celery sticks, carrots) | Not reported | United States | *Cyclospora* (2018) | CDC 2018d |  |
| Watercress | United States | United States | Hepatitis A (2001) | Anon 2001 |  |
| Watercress | Not reported | Mexico | *Cyclospora* (2001) | Cited by Hadjilouka and Tsaltas 2020 |  |
| Watercress | France | France | *Fasciola hepatica* (2002) | Mailles et al. 2006 |  |
| Watercress | Unknown | United Kingdom | Norovirus (2000) | Anon 2005; Little and Gillespie 2008 |  |
| Watercress | United Kingdom | United Kingdom | *Escherichia coli* O157 (2013a, 2013b) | Launders et al. 2013; Jenkins et al. 2015 |  |

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| a A second outbreak in the same year involving different producers and a different importer b Raw broccoli was the major component of a salad c The first known case of *L. monocytogenes* as a foodborne pathogen  d The first reported case of *L. monocytogenes* as a foodborne pathogen  **References**  [Ackers, M.L., Mahon, B.E., Leahy, E., Goode, B., Damrow, T., Hayes, P.S., et al. 1998 An outbreak of *Escherichia coli* O157:H7 infections associated with leaf lettuce consumption. J Infect Dis 177: 1588–1593.](https://doi.org/10.1086/515323)  [Alarcón de Noya B, Díaz-Bello Z, Colmenares C, Ruiz-Guevara R, Mauriello L, Zavala-Jaspe R, Suarez JA, Abate T, Naranjo L, Paiva M, Rivas L, Castro J, Márques J, Mendoza I, Acquatella H, Torres J, Noya O. (2010) Large urban outbreak of orally acquired acute Chagas disease at a school in Caracas, Venezuela. J. 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