

Table S1. Summary of reports and studies identifying opportunistic premise plumbing pathogens in residential drinking water systems.

Study Site	Reservoir	Pathogen ^a	Prevalence ^b	Detection Method ^c	Antimicrobial Characteristics ^d	Country ^e	Year ^f	Reference ^e
House Commercial building Hotel	Tap	<i>Legionella</i> spp.	Water: 19.8% total buildings *	Culture	N/A	USA	2002	[9]
House	Washing machine	<i>Methylobacterium</i> spp. <i>Pseudomonas</i> spp. <i>Stenotrophomonas</i> spp.	Not specified	Culture	N/A	USA Switzerland Germany South Korea	2010 ^f	[30]
House	Tap	<i>Pseudomonas</i> spp.	Not specified	Culture	N/A	Australia Germany India Malaysia Saudi Arabia South Africa England USA	2009	[31]
House	Water	NTM	Water: 12% *	N/A	N/A	USA and Finland	2015 ^f	[32]
House Hotel University	Sink	<i>P. aeruginosa</i>	Biofilm: 26.1% *	Culture	N/A	Nigeria	2013 ^f	[33]
House Hotel	Cooling tower	<i>L. pneumophila</i>	Water: 22.5% *	Culture	N/A	Iran	2015	[34]
House Accommodation sites	Hot water system Shower Tap	<i>Legionella</i> spp.	Water: 71.4% accommodation buildings (>1000 CFU/L)	Culture	N/A	Hungary	2013	[35]

61.5% house (central hot water supplies 50 CFU/L) 7.7% house (individual hot water supplies 50–5300 CFU/L)								
House Commercial building	Tap	<i>L. pneumophila</i> <i>M. avium</i>	Water: <i>L. pneumophila</i> : 38% (3188 CE/L) <i>M. avium</i> : 42% (2006 CE/L)	Culture and molecular	N/A	USA	2014	[36]
Public bath House	Bath	<i>Legionella</i> spp. <i>Mycobacterium</i> spp.	Water: Public bath: <i>Legionella</i> spp.: 3% ($<10 \times 10^4$ CFU/100mL) NTM: 0.6% * House bath: <i>Legionella</i> spp: 60.5% ($<10 \times 10^4$ CFU/100mL) NTM: 21% *	Culture	N/A	Japan	2009–2011	[37]
House Commercial building	Tap	<i>P. aeruginosa</i>	Water: 40% (1–75 CFU/100mL)	Culture	Disc diffusion: 54.5% MDR	India	2003	[38]
House DWDS	Tap	<i>Aeromonas</i> spp.	Not specified	Culture	N/A	Canada	1997 ^f	[39]
Hotel Retirement home	Water	<i>Legionella</i> spp.	Water: 66.6% of seasonal facilities (450 CFU/L ⁻¹)	Culture	N/A	Croatia	2009	[40]
House DWDS	Shower Tap Municipal water Cooling tower	<i>Legionella</i> spp.	Water: 30% * Biofilm: 56% *	Culture	N/A	USA*	1992 ^f	[41]
House DWDS	Tap	<i>H. pylori</i>	Water: 15% *	Culture and molecular	N/A	England	2004 ^f	[42]

House School	Water	NTM	Water: 65% houses ($1\text{--}3 \times 10^2$ CFU/L) 100% water meter (5×10^2 CFU/L) 100% schools ($1.6 \times 10^2\text{--}6 \times 10^2$ CFU/L) 100% swimming pools ($2.9 \times 10^1\text{--}3.1 \times 10^4$ CFU/L) Biofilm: 100% house (shower floor) ($1 \times 10^2\text{--}1.2 \times 10^5$ CFU/cm ²) 67% public building (shower floor) ($5\text{--}3.7 \times 10^3$ CFU/cm ²) 50% pool edge (4.5 CFU/cm ²)	Culture	N/A	Italy	2014 ^f	[43]
House	Tap Well	<i>Acinetobacter haemolyticus</i> <i>Aeromonas hydrophila</i> <i>Pseudomonas aeruginosa</i>	Water: <i>P. aeruginosa</i> : 11.36% well water (166.7 CFU/mL) <i>A. haemolyticus</i> : 11.1% tap water (333.3 CFU/mL) <i>A. hydrophila</i> : 6.82% tap water (333.3 CFU/mL)	Culture	N/A	Saudi Arabia	2014	[44]
House	Water	<i>Legionella</i> spp.	Water: 77.5% *	Molecular	N/A	USA	2016	[45]
House	Tap	<i>Helicobacter</i> spp.	Water: 12% *	Molecular	N/A	Sweden	1998 ^f	[46]
House	Tap	<i>A. hydrophila</i>	Water: Contaminated well water linked to 1	Culture	N/A	USA	2015	[47]

recurrent clinical case *								
House	Water	<i>L. pneumophila</i>	Water: 15.9% *	Molecular	N/A	USA	2020 ^f	[48]
House	Well	<i>P. aeruginosa</i> <i>Acinetobacter</i> spp.	Water: <i>P. aeruginosa</i> : 17 urban * 19 rural * <i>Acinetobacter</i> spp.: 5 urban *	Culture	Disc diffusion: <i>P. aeruginosa</i> : 2.8% R PIP ^R 5.6% R CIP ^R 5.6% R NET ^R <i>Acinetobacter</i> spp.: 62.5% R AMP ^R 37.5% R AMX ^R 50% R CFZ ^R 37.5% R SEF ^R	India	2009	[49]
House	Tap	<i>Pseudomonas</i> spp.	Water: Rain water: 25% * Well water: 75% *	Culture	Disc diffusion: 100% R AMP ^R 100% R COL ^R 75% R GEN ^R 100% R STR ^R 100% R TET ^R 50% R COT ^R	Nigeria	2011	[50]
House	Water	<i>Legionella</i> spp. <i>Mycobacterium</i> spp.	Water: <i>Legionella</i> spp: 86.7% * <i>Mycobacterium</i> spp.: 68.1% *	Culture and molecular	N/A	USA	2020 ^f	[51]
House	Shower Tap Water heater	<i>L. pneumophila</i>	Water: Water heater linked to 1 clinical case (10 ⁹ CFU/L)	Culture	N/A	USA	2001 ^f	[52]
House	Tap	<i>P. aeruginosa</i>	Water: 7.14% *	Culture	Disc diffusion: 100% AMC ^R 100% AMP ^R 100% CHL ^R 100% TET ^R 100% SXT ^R 50% CRO ^R 40% GEN ^R	Ethiopia	2013	[53]

House	Hot water system Shower	<i>Legionella pneumophila</i>	Water: 23.3% hot water system * 7.5% tap water * 6% shower water *	Culture	Disc diffusion: 100% CIP ^S 100% RIF ^S 89.2% AZM ^R 71.4% MXF ^R 64.3% CLR ^R 35.7% TGC ^R 32.1% ERY ^R 21.4% CRO ^R 17.8% DOX ^R 14.2% LVX ^R	Iraq	2019 ^f	[54]
House	Tap Water storage	<i>Aeromonas</i> spp.	Water: Tap: 6% * Water storage: 12% *	Culture	Disc diffusion: 55% R AMP ^R 48% R ERY ^R 41% R AMC ^R 28% R CAZ ^R 27% R FOX ^R 26% R CRO ^R 26% CTX ^R 22% R PIP ^R 14% R SXT ^R 12% R TET ^R 11% R ATM ^R 8% R MEM ^R 6% R IPM ^R 2% R NAL ^R 1% R CIP ^R 1% R TOB ^R 1% R GEN ^R	Turkey	2005	[55]
House	Tap	<i>P. aeruginosa</i>	Water: 100% (10 ⁵ –10 ⁹ CFU)	Culture	Disc diffusion: 13 isolates MDR	Iran	2019 ^f	[56]
House	Water	<i>Aeromonas</i> spp.	Not specified	Culture	Disc diffusion: CHL ^R PEN ^R AMP ^R CLOXA ^R	South Africa	2006	[57]
House	Water	<i>P. aeruginosa</i>	Water: House: 2.13% *	Culture	Disc diffusion: 13.2% MDR	Italy	2015	[58]

House	Water storage	<i>Pseudomonas</i> spp. <i>S. maltophila</i> <i>Acinetobacter lwoffii</i> <i>A. hydrophila</i>	Water: <i>P. aeruginosa</i> 6% * <i>P. fluorescens</i> 6.75% * <i>P. luteola</i> 0.7% * <i>P. stutzeri</i> 2.2% * <i>S. maltophila</i> 1.5% * <i>A. lwoffii</i> 7.5% * <i>A. hydrophila</i> 0.7% *	Culture	Broth microdilution: 80.6% MDR	South Africa	2012	[59]
House	Dishwasher	<i>S. maltophila</i> <i>P. aeruginosa</i>	Biofilm: <i>S. maltophila</i> : 33% * <i>P. aeruginosa</i> : 20% *	Culture	Broth microdilution: 57% R CTX ^R 70% R CAZ ^R	Slovenia*	2019 ^f	[60]
House	Sink U-bend	<i>Pseudomonas</i> spp. <i>S. maltophila</i> <i>A. hydrophila</i> <i>A. baumannii</i>	Biofilm: <i>Pseudomonas putida</i> : 20.9% * <i>P. aeruginosa</i> : 18.7% * <i>A. hydrophila</i> : 12.1% * <i>S. maltophila</i> : 11% * <i>A. baumannii</i> : 2.2% *	Molecular	VITEK-2: <i>P. aeruginosa</i> (1) isolate MDR <i>S. maltophila</i> (3) isolates MDR BAC ^R >640 µg/mL	Germany	2018	[61]
House	Tap	<i>A. hydrophila</i>	Biofilm: 24% *	Culture	VITEK-2: TIC ^R CAZ ^R ATM ^R MIN ^I	Iraq	2019 ^f	[62]
House	Water	<i>L. pneumophila</i> <i>Acinetobacter</i> spp. <i>Pseudomonas</i> spp.	Water: 5% *	Molecular	<i>P. aeruginosa</i> aph(3')-I	China	2019 ^f	[63]
House	Shower drain	<i>S. maltophila</i> <i>P. aeruginosa</i> <i>Acinetobacter</i> spp. <i>Aeromonas</i> spp.	Biofilm: <i>S. maltophila</i> : 27.9% * <i>P. aeruginosa</i> : 9.3% *	Culture	<i>Bla</i> CMY-2, <i>bla</i> ACT/MIR and <i>bla</i> OXA-48	Germany	2019	[64]

<i>Acinetobacter</i> spp.: 1.6% * <i>Aeromonas</i> spp.: 3.9% *								
Drinking water distribution system	Water	<i>Aeromonas</i> spp.	Water: 32.4% *	Culture	100% AMP ^R 100% PMB ^R 77.8% CEF ^R 83.3% ERY ^R	India	1999 ^f	[65]
House	Shower	<i>P. aeruginosa</i>	Water: Shower water linked to 1 clinical case *	Culture	N/A	Israel	1986	[66]
House	Bath	<i>M. avium</i>	Water: Bath water linked to 1 clinical case*	Culture	RIF ^R STR ^R EMB ^R	Japan*	2000	[67]
House	Water	<i>Pseudomonas</i> spp.	Water: 20.8% (6–1100 CFU/ 250 mL)	Culture	N/A	Cyprus	2015 ^f	[68]
Drinking water distribution system	Municipal water	<i>L. pneumophila</i> <i>Mycobacterium</i> spp.	Biofilm and Water: <i>Mycobacterium</i> spp.: 66% buildings * <i>L. pneumophila</i> : 83% buildings *	Molecular	N/A	Canada	2018	[69]
House	Shower Tap	<i>L. pneumophila</i>	Water: Residential water linked to 2 clinical cases (6×10^3 – 2.3×10^4 CFU/L)	Culture	N/A	Israel*	2003 ^f	[70]
House	Tap	<i>Pseudomonas</i> spp. <i>S. maltophilia</i>	Not specified	Culture	N/A	Canada*	1988	[71]
House	Tap	<i>Mycobacterium xenopei</i>	Water: 6% *	Culture	N/A	United Kingdom	1970 ^f	[72]
House	Shower	<i>Mycobacterium xenopi</i>	Biofilm: 95.4% * Water: 90.9% *	Culture	N/A	Czech Republic	1990	[73]
House	Tap	<i>L. pneumophila</i> <i>M. avium</i>	Not specified	Culture	N/A	USA	2007	[74]

House	Tap	<i>Mycobacterium</i> spp.	Water: 39.42% *	Culture and molecular	N/A	India	2000	[75]
House	Tap	NTM	Water: 16% *	Culture	N/A	Mexico	2009	[76]
House	Tap	<i>Mycobacterium</i> spp.	Water: 25% (4–1600 CFU/L)	Culture	N/A	Germany	1992	[77]
DWDS	Water	<i>Mycobacterium</i> spp.	Water: 38.7% *	Culture	N/A	Czech Republic	1994 ^f	[78]
House	Water	<i>M. xenopi</i>	Water: 45.5% of patients' houses 29.4% of neighbours' houses*	Culture	N/A	Prague	1993 ^f	[79]
House	Tap	NTM	Water: 33.9% *	Culture	N/A	Czech Republic	2013 ^f	[80]
House	Tap Shower	<i>Methylobacterium</i> spp. <i>M. avium</i>	Biofilm: <i>Methylobacterium</i> spp.: 46% (>10 CFU/mL) <i>M. avium</i> : 27% (>1 CFU/mL)	Culture	N/A	USA	2016 ^f	[81]
House	Tap	<i>Legionella</i> spp. <i>Mycobacterium</i> spp. <i>Pseudomonas</i> spp.	Not specified	Molecular	N/A	China	2021 ^f	[82]
House	Water	<i>H. pylori</i>	Water: 53.3% *	Culture	N/A	India	2013 ^f	[83]
House	Tap	<i>Legionella</i> spp. <i>Mycobacterium</i> spp. <i>Helicobacter</i> spp.	Water: <i>Legionella</i> spp.: 21% * <i>Mycobacterium</i> spp.: 35.1% * <i>Helicobacter</i> spp.: 7% *	Culture and molecular	N/A	USA	2018 ^f	[84]
House	Water storage tank	<i>Aeromonas</i> spp. <i>Pseudomonas</i> spp.	Biofilm: <i>Aeromonas</i> spp.: 77.5% *	Culture	N/A	Oman	2011 ^f	[85]

<i>Pseudomonas</i> spp.: 97.5% *								
House	Bath Shower	<i>Legionella</i> spp.	Water: <i>Legionella</i> spp.: 72.5% (5–5625 CFU/L) <i>L. pneumophila</i> : 59.5% (3.5.5–990 CFU/L)	Culture	N/A	Morocco	2013	[86]
House	Hot water tank Tap Shower	<i>Legionella</i> spp.	Water: <i>Legionella</i> spp.: 1.5% * <i>L. pneumophila</i> : 11.5% *	Culture	N/A	USA	2016	[87]
House	Shower	<i>Legionella</i> spp.	Water: 8.1% (4.0 × 10 ¹ –1.3 × 10 ⁴ CFU/L) Biofilm: 1.1% (5.4×10 ² CFU/swab)	Culture and molecular	N/A	United Kingdom	2017 ^f	[88]
House	Tap	<i>Legionella</i> spp.	Water: 20% (250–1000 CFU/L)	Culture	N/A	Croatia	2009	[89]
House	Hot water	<i>L. pneumophila</i>	Water: 12.7% (500–13,000 CFU/L)	Culture	N/A	Croatia	2011	[90]
Accommodation site	Water	<i>Legionella</i> spp.	Water: 27.3% *	Culture	N/A	Croatia	2012	[91]
House	Tap	<i>Legionella</i> spp.	Water: Residential: 52% (10 ² –10 ⁵ CFU/L)	Culture	N/A	Italy	2008	[92]
House	Shower Sprinkler	<i>L. pneumophila</i>	Water: 10% (3.0×10 ² – 8.0×10 ⁶ CFU/L)	Culture	N/A	New Zealand	2006	[93]
House	Water	<i>Legionella</i> spp.	Water: Hot water: 40% (2 × 10 ² to 7.6×10 ⁵ CFU/L)	Culture	N/A	Italy	2019	[94]

			Cold water: 12% (1×10^2 and 1.2×10^4 CFU/L)					
House	Building inlet	<i>Legionella</i> spp.	Water: 23% (2×10^2 to 4.8×10^4 CFU/L)	Culture	N/A	Italy	2017	[95]
House	Tap	<i>L. pneumophila</i>	Water: Residential water linked to 3 clinical cases *	N/A	N/A	Italy*	1986	[96]
House	Water	<i>A. hydrophila</i>	Water: 27%*	N/A	N/A	Philippines	2013	[97]
House	Water storage	<i>Pseudomonas</i> spp. <i>L. pneumophila</i>	Water: <i>L. pneumophila</i> : 13.3% (100–800 CFU/L) <i>Pseudomonas</i> spp.: 86.6% (7–1000 CFU/100mL)	Culture	N/A	United Kingdom	2016	[98]
House	Shower	<i>Legionella</i> spp.	Water: <i>Legionella</i> spp.: 73.5% (7603 copies/mL) <i>L. pneumophila</i> : 63.2% (4295 copies/mL)	Molecular	N/A	Australia	2018	[99]
House	Ice cube	<i>Pseudomonas</i> spp. <i>Acinetobacter</i> spp.	Not specified	Culture	N/A	Italy	2017	[110]
House	Tap	<i>L. pneumophila</i>	Water: 20% (1.0×10^4 – 2.1×10^5 CFU/L)	Culture	N/A	Finland*	1999	[119]
House	Tap	<i>Legionella</i> spp.	Water: 10% * Biofilm: 4% *	Culture and molecular	N/A	New Zealand	2000 ^f	[120]
House	Shower	<i>L. pneumophila</i>	Water:	Culture	N/A	Italy	2000	[121]

	Water heater		30% hot water tanks *					
			6.2% shower *					
House	Hot water system	<i>Legionella</i> spp.	Water: 12% (0 to 1×10^5 CFU/100mL)	Culture	N/A	Germany	2003	[124]
House	Tap	<i>A. hydrophila</i> <i>P. aeruginosa</i>	Water: <i>A. hydrophila</i> : 6.6% without POU filter (10 CFU/500mL) 10.5% with POU filter (29.5 CFU/500mL) <i>P. aeruginosa</i> : 16.6% without POU (15 CFU/500mL) 33.3% with POU filter (102 CFU/500mL)	Culture	N/A	USA	1998	[127]
House	Sink	<i>P. aeruginosa</i>	Biofilm: 19% (1×10^2 – 1.5×10^5 CFU/swab)	Culture	N/A	USA	1997 ^f	[128]
House	Tap Shower	<i>Mycobacterium</i> spp. <i>Legionella</i> spp. <i>P. aeruginosa</i>	Water: <i>Mycobacterium</i> spp. Cold water: 95.4% (1–500 CFU/500mL) Warm water: 15.4% 1–1000 CFU/500mL) <i>Legionella</i> spp.: 9.2% (50–5000 CFU/500mL) <i>P. aeruginosa</i> : 10.8% (5–2500 CFU/500mL)	Culture	N/A	Germany	2007	[132]
DWDS	Municipal water	<i>Mycobacterium</i> spp.	Water: 70% *	Culture	N/A	Australia	2008	[136]

House	Shower	<i>Legionella</i> spp.	Water: 16.1% shower * 1 boiler tank *	Culture and molecular	N/A	Brazil	2005	[141]
House	Tap Shower	<i>Legionella</i> spp.	Water: 32.3% negative by all methods * 2.9% positive by all methods * 41.2% positive by PCR only * 23.5% positive by FISH and PCR *	Culture and molecular	N/A	Germany*	2002 ^f	[147]
House	Water	<i>L. pneumophila</i>	Water: Residential water linked to 2 clinical cases (10–100 CFU/mL)	Culture	N/A	Turkey*	2016 ^f	[155]
House	Shower	<i>M. avium</i>	Biofilm and water: Residential shower linked to 1 clinical isolate (2–240 CFU/mL ⁻¹)	Culture	N/A	USA	2002	[156]
House	Water	<i>L. pneumophila</i>	Water: Residential water linked to 1 clinical case (10 ⁸ CFU/L)	Culture	N/A	Netherlands *	1993	[157]
House	Shower Tap	<i>Legionella</i> spp.	Water: 65% (1–4000 CFU/mL)	Culture	N/A	Germany	1993 ^f	[158]
House	Tap	<i>L. pneumophila</i>	Water: Residential water linked to 1 clinical case (3 × 10 ⁴ CFU/L)	Culture	N/A	Israel	2012	[159]
House	Tap	<i>L. pneumophila</i>	Water: Residential water linked to 1 clinical case (2.9–7.2 × 10 ⁴ CFU/L)	Culture	N/A	Korea*	2016	[160]

House	Shower	<i>L. pneumophila</i>	Water: Shower water linked to 1 clinical case (1.95×10^4 CFU/L)	Culture	N/A	Switzerland	1999	[161]
House	Shower	<i>L. pneumophila</i>	Water: Shower linked to 1 clinical case (2.54 CFU/mL)	Culture	N/A	USA	2018	[162]
House	Tap Shower	<i>Legionella</i> spp.	Water: Hot water tank linked to 1 clinical case (400–2000 CFU/mL)	Culture	N/A	USA*	1987 ^f	[163]
House	Water	<i>Legionella</i> spp.	Water: Municipal water linked to 8 clinical cases ($1 \times 10^4 - 6 \times$ 10^5 CFU/L)	Culture	N/A	USA	1992 ^f	[164]
House	Tap	<i>L. pneumophila</i>	Water: Residential water linked to 1 clinical case ($500-4.5 \times 10^4$ CFU/L)	Culture	N/A	Australia	2003	[165]
Dormitory	Tap	<i>Legionella</i> spp.	Water: 50% (5-68 CFU/L)	Culture	N/A	Germany	1999	[171]
House	Water meter	<i>Mycobacterium</i> spp. <i>Pseudomonas</i> spp.	Biofilm: <i>Mycobacterium</i> spp.: 93%* <i>Pseudomonas</i> spp.: 100%*	Molecular	N/A	China	2014	[172]
House	Tap Shower	MAC	Water: <i>Mycobacterium</i> spp.: 17%* MAC: 2%*	Culture	N/A	USA	1992 ^f	[173]
House	Tap Drain	<i>P. aeruginosa</i>	Biofilm: Sink: 6.1%* Tap: 4.7%*	Culture	N/A	England*	1972 ^f	[174]

House	Hot water system	<i>Legionella</i> spp.	Water: (250-10 ⁴ CFU/L) Culture Hot water: 6.5% Mixed water: 5.6% IFA Hot water: 41% Mixed water: 52%	Culture and molecular	N/A	France	2006	[175]
House	Tap Shower	<i>Mycobacterium</i> spp.	Water: <i>M. chimaera</i> : 73%* MAC: 19.5%*	Culture	N/A	USA	2013 ^f	[176]
House	Shower	<i>Methylobacterium</i> spp.	Not specified	Culture	N/A	USA*	2012 ^f	[177]
House	Tap	<i>M. avium</i>	Water: 12.5%*	Culture	N/A	USA	2002 ^f	[178]
House	Shower Tap	<i>Legionella</i> spp.	Water: 20.5%*	Culture	N/A	Netherlands	2003	[179]
House	Tap	<i>Acinetobacter</i> spp.	Not specified	Culture	N/A	Portugal*	2009	[180]
House	Tap Shower	NTM	Water: 65%*	Culture	N/A	Netherlands	2010 ^f	[181]
House	Tap	<i>Pseudomonas</i> spp. <i>Acinetobacter</i> spp.	Water: <i>Pseudomonas</i> spp.: 2.2%* <i>Acinetobacter</i> spp.: 4.4%*	Molecular	N/A	Belgium	2013	[182]
House	Tap Shower	<i>Mycobacterium</i> spp.	Water: Case residence: Bathroom tap: 23%* Kitchen tap: 23%* Shower aerosol: 18%* Control residence: Bathroom tap: 11%* Kitchen tap: 14%* Shower aerosol: 6%*	Culture	N/A	USA	2011	[183]
House	Bath	<i>L. pneumophila</i>	Water:	Culture	N/A	Japan	2018 ^f	[184]

Bath water linked to 1 clinical case*								
House	Water storage	<i>Pseudomonas</i> spp. <i>Mycobacterium</i> spp. <i>Methylobacterium</i> spp.	Not specified	Culture	N/A	Lebanon	2004 ^f	[185]
House	Shower Tap	NTM	Water: 40% (27 to 1.7 × 10 ⁴ CFU/mL)	Molecular	N/A	USA	2011	[186]
House	Shower Tap	NTM	Water: Residential water linked to 35% of clinical cases*	Culture	N/A	Australia	2013 ^f	[187]
House	Bath	<i>M. avium</i>	Water: Bath water linked to 1 clinical case*	Culture and molecular	N/A	Japan*	2001	[188]
House	Tap Shower	<i>L. pneumophila</i>	Water: 6.2%*	Culture	N/A	USA	1992	[189]
House	Tap Shower Hot water tank	<i>L. pneumophila</i>	Water: 6.4%*	Culture	N/A	USA	1992 ^f	[190]
House	Tap	<i>Legionella</i> spp. <i>P. aeruginosa</i> <i>Acinetobacter</i> spp. <i>Aeromonas</i> spp.	Water: <i>Legionella</i> spp.: 77.5% (<200 CFU/mL) <i>P. aeruginosa</i> : 19.8%* <i>Acinetobacter</i> spp.: 13.5%* <i>Aeromonas</i> spp.: 16.2%*	Culture	N/A	Poland	2007–2010	[191]
House	Tap Water storage	<i>Legionella</i> spp.	Water: 5% *	Culture	N/A	Canada	1992	[192]
House	Tap Drain	<i>Pseudomonas</i> spp.	Biofilm: Tap: 1.2%* Sink: 2%*	Culture	N/A	Scotland*	1991	[193]

House	Water	<i>A. hydrophila</i>	Water: 64.28% *	Culture	N/A	Saudi Arabia	1985	[194]
House	Tap Shower	<i>Legionella</i> spp.	Water: 74% *	Culture	N/A	USA	2009	[195]
House	Drain Tap	<i>Pseudomonas</i> spp.	Biofilm: Kitchen sink: 24% * Kitchen drain: 40% * Bathroom sink: 21% * Bath: 47% *	Culture	N/A	USA	2006	[196]
House	Drain Tap	<i>Pseudomonas</i> spp. <i>A. hydrophila</i>	Biofilm: Drain: 2.2% * Tap: 10.9% * Water: 8.1% *	Culture	N/A	United Kingdom	1982 ^f	[197]
House	Tap	<i>Legionella</i> spp.	Water: 89.5% (5.45 CFU/mL)	Culture	N/A	Germany	1999 ^f	[198]
House	Shower	<i>Mycobacterium</i> spp.	Biofilm: 78.5% (15 - 5.6x10 ⁶ CFU/cm ²)	Culture	N/A	Germany	1992	[199]
House	Tap Drain	<i>P. aeruginosa</i>	Biofilm: Bath drain: 12.4% * Bath tap: 14.3% * Shower drain: 17.6% * Showerhead: 0% * Kitchen drain: 5% * Kitchen tap: 4.5% *	Culture	N/A	Belgium	2005	[200]
House	Shower	<i>M. avium</i>	Biofilm: 93% (10 ² –10 ¹⁰ CE/L)	Molecular	N/A	United Kingdom	2011	[201]
House	Water heater	<i>Legionella</i> spp.	Water: 6.6% houses *	Culture	N/A	USA	2016	[202]
House	Shower Tap Drain Ice dispenser	<i>Pseudomonas</i> spp.	Biofilm: 48.6% *	Culture	N/A	USA	2007	[203]
House	Tap	<i>P. aeruginosa</i>	Water:	Culture	N/A	Germany	2004 ^f	[204]

	Drain		71.6% *					
House	Water	<i>Methylobacterium</i> spp.	Not specified	Molecular	N/A	United Kingdom	2013 ^f	[205]
House	Dishwasher	<i>Pseudomonas</i> spp. <i>Acinetobacter</i> spp.	Not specified	Molecular	N/A	Slovenia	2018 ^f	[206]
House	Drain	<i>P. aeruginosa</i>	Biofilm: 28% *	Molecular	N/A	USA	2012	[207]
House	Water	<i>Legionella</i> spp.	Water: 24.1% (3.75–415.5 CFU/mL)	Culture	N/A	USA	2019 ^f	[208]
House	Tap	<i>P. aeruginosa</i>	Water: 12% (2–100 CFU/100mL)	Culture	N/A	Cyprus	2013	[209]
House	Shower	<i>L. pneumophila</i>	Water: Residential shower linked to 1 clinical case *	Molecular	N/A	Italy	1985	[210]
House	Tap	<i>Acinetobacter</i> spp. <i>P. aeruginosa</i>	Not specified	Culture	N/A	Nigeria	2008 ^f	[211]
House	Water	<i>Legionella</i> spp.	Water: 25% (10 ³ cells/mL)	Culture	N/A	Germany*	1996 ^f	[212]
House	Drain Tap Shower	<i>P. aeruginosa</i>	Biofilm: (>1 CFU/10 cm ²) Kitchen tap: 7.2% Kitchen sink: 12.9% Drain: 27.1% Bathroom faucet: 2.3% Bath: 1.2%	Culture	N/A	Japan	2002 ^f	[213]
House	Drain Shower Tap	<i>P. aeruginosa</i>	Not specified	Culture	N/A	Japan	1999	[214]
House	Water	<i>Aeromonas</i> spp.	Water: 20% *	Culture	N/A	South Africa	2006	[215]
House	Tap Shower Drain	MAC	Biofilm: 5.4% shower * 4% bath drain *	Culture	N/A	Japan*	2007 ^f	[216]

Water: 6.5% shower water *								
6.25% bath water *								
Apartment	Water	<i>Legionella</i> spp.	Water: 42.9% (10 ² –10 ⁴ CFU/L)	Culture	N/A	Italy	2009	[217]
House	Tap Shower Bath	<i>Legionella</i> spp.	Water: 36.7% (>10 ² CFU/L)	Culture	N/A	Italy	2005	[218]
House	Water	<i>Mycobacterium leprae</i>	Water: 24.2% *	Molecular	N/A	India	2016 ^f	[219]
House	Water	<i>Aeromonas</i> spp.	Water: 3.7% houses (5 CFU/mL)	Culture	N/A	Japan	2011	[220]
House	Drain	<i>P. aeruginosa</i>	Biofilm: 100% (<4–9.52 log ₁₀ CFU)	Culture and molecular	N/A	United Kingdom	2003 ^f	[221]
House	Bath Shower	<i>M. avium</i>	Water: Residential water linked to 1 clinical case *	Culture	N/A	Canada	2005 ^f	[222]
House	Water	<i>L. pneumophila</i>	Not specified	Culture	N/A	Canada	2021 ^f	[223]
DWDS	Biofilm	<i>Mycobacterium</i> spp.	Biofilm: 100% *	Molecular	N/A	Sweden	2011	[224]
House	Water	<i>Legionella</i> spp.	Water: Residential water linked to 1 clinical (1–2 × 10 ⁴ CFU/L ⁻¹)	Culture	N/A	Germany	2004	[225]
House	Tap	<i>Aeromonas</i> spp. <i>Mycobacterium</i> spp.	Biofilm and Water: <i>Aeromonas</i> spp.: 90% * <i>Mycobacterium</i> spp.: 60% *	Culture and molecular	N/A	Netherlands	2017 ^f	[226]
House	Water purifier	<i>P. aeruginosa</i>	Not reported	Molecular	N/A	Germany*	2020 ^f	[227]
House	Shower	<i>Legionella</i> spp.	Biofilm:	Molecular	N/A	Switzerland	2011	[228]

		<i>Mycobacterium</i> spp.	<i>Legionella</i> spp.: 12.5% * <i>Mycobacterium</i> spp.: 6.25% * Water: <i>Legionella</i> spp.: 23% * <i>Mycobacterium</i> spp.: 10.4% *					
House	Tap	<i>Aeromonas</i> spp.	Water: <i>Aeromonas</i> spp.: 4% houses *	Culture	N/A	Canada	1992	[229]
House	Hot water system	<i>Legionella</i> spp. <i>P. aeruginosa</i>	Water: <i>Legionella</i> spp.: 30.5% (25–9.75 × 10 ⁴ CFU/L ^{−1}) <i>P. aeruginosa</i> : 7.1% (4–8.2 × 10 ³ CFU/100mL)	Culture	N/A	Italy	2005	[230]
House	Tap	<i>Mycobacterium canariasisense</i>	Water: 47.4% *	Culture	N/A	Spain	2014	[231]
House	Tap Shower Ice dispenser	<i>M. avium</i>	Biofilm: 56.8% kitchen sink tap * 41.7% bathroom taps * 37.1% shower heads * 37.9% shower pipes * 14.2% ice dispensers *	Culture	N/A	USA	2012	[232]
House	Water	<i>Legionella</i> spp.	Water: 47.8% (15 – 370 CFU/100 mL) Biofilm: 18.9% *	Culture	N/A	Japan	2014	[233]
House	Tap	<i>P. aeruginosa</i>	Water: 12% *	Culture	N/A	Germany*	2001	[234]
House	Rainwater	<i>L. pneumophila</i>	Water	Molecular	N/A	USA	2013	[235]

		<i>M. avium</i>	<i>L. pneumophila</i> : 8.7% (2.9 log ₁₀ genomic targets/L) <i>M. avium</i> : 30% (3.9 log ₁₀ genomic targets/L)					
House	Tap	<i>L. pneumophila</i>	Water: 1.9% *	Culture	N/A	England	1987 ^f	[236]
House	Hot water heater	<i>L. pneumophila</i>	Water: Electric heater: 30% * Oil/gas heater: 6% *	Culture	N/A	Canada	1985 ^f	[237]
House	Tap Shower	<i>L. pneumophila</i>	Water: Tap: 1 isolate *	Molecular	N/A	China	2014	[238]
House	Rainwater	<i>Pseudomonas</i> spp.	Water: Dry season: 9% * Wet season: 91% *	Culture	N/A	Bangladesh	2009	[239]
House	Bath	<i>L. pneumophila</i>	Water: Bath water linked to 1 clinical case *	Culture	N/A	Japan*	2012 ^f	[240]
House	Water	<i>Legionella</i> spp. <i>Mycobacterium</i> spp.	Water: <i>Legionella</i> spp.: 72% * <i>Mycobacterium</i> spp.: 67% *	Molecular	N/A	USA	2020 ^f	[241]
House	Drain Bath Shower	<i>Mycobacterium</i> spp.	Biofilm: 96.5% drains (<10 ¹ – 10 ⁷ cells/cm ²) 44.4% baths (<10 ¹ – 10 ⁷ cells/cm ²) 48.7% kitchen drains (<10 ¹ – 10 ⁷ cells/cm ²) 13% inner shower head (<10 ¹ – 10 ⁵ cells/cm ²) 2.5% outer showerhead (<10 ¹ – 10 ² cells/cm ²)	Molecular	N/A	Japan	2014 ^f	[242]
House	Shower	<i>M. avium</i>	Water:	Culture	N/A	USA	2016	[243]

			11% *					
House	Tap	<i>Methylobacterium</i> spp.	Water: 12% *	Molecular	N/A	USA	2015 ^f	[244]
House	Tap Shower Drain	NTM	Biofilm: Showerhead: 69% * Kitchen: 59% * Bathroom: 67% *	Molecular	N/A	USA	2013	[245]
House	Shower	NTM	Water: Shower water linked to 1 clinical case *	Culture	N/A	USA*	2011 ^f	[246]
House	Tap	NTM <i>P. aeruginosa</i> <i>S. maltophilia</i>	Biofilm & water: NTM: 100% * <i>P. aeruginosa</i> : 100% * <i>S. maltophilia</i> : 100% *	Molecular	N/A	USA	2016	[247]
House	Tap	NTM	Water: 100% *	Molecular	N/A	USA	2016	[248]
House	Tap Shower	MAC	Water: NTM: 93% houses MAC: 21% houses (1- 1×10^3 CFU/500 ⁻¹ mL)	Culture	N/A	USA	1994 ^f	[249]
House	Spa Shower Tap	<i>P. aeruginosa</i>	Water: 18.2% (100–500 CFU/250mL)	Culture	N/A	Italy*	2009	[250]
House	Shower	<i>Mycobacterium</i> spp.	Biofilm: 13.5% *	Molecular	N/A	USA	2016	[251]
House	Tap	<i>L. pneumophila</i>	Water: 6% *	Culture	N/A	USA	2016	[252]
House	Water	<i>Mycobacterium</i> spp.	Water: 81.9% (10^2 – 10^3 CFU/L)	Culture	N/A	Germany	1991 ^f	[253]
House	Water	<i>A. baumannii</i> <i>P. aeruginosa</i>	Water: <i>A. baumannii</i> : 80% * <i>P. aeruginosa</i> : 85% *	Culture	N/A	Pakistan	2004	[254]

House	Tap Shower	NTM	Biofilm: 28% * Water: 24% *	Culture	N/A	USA	2011 ^f	[255]
House	Spa Garden hose	<i>Legionella</i> spp.	Water: Spa and garden hose linked to 3 clinical isolates *	Culture	N/A	Netherlands	2009	[256]
House	Water	<i>P. aeruginosa</i>	Water: Bathroom linked to one clinical case *	Molecular	N/A	Japan*	2013 ^f	[257]
House	Tap Shower Hot water tank	<i>L. pneumophila</i>	Water: 33% houses Residential water linked to 14% of clinical cases *	Culture	N/A	Canada	2012 ^f	[258]
House	Water	NTM	Water: 11.2% *	Culture	N/A	Greece	2013	[259]
House	Tap	<i>L. pneumophila</i>	Water: 28.6% ($>1 \times 10^4$ CFU/L)	Culture and molecular	N/A	USA	2010	[260]
House	Water	<i>Legionella</i> spp. <i>P. aeruginosa</i>	Water: <i>Legionella</i> spp.: 30% (200–2650 CFU/L ⁻¹) <i>P. aeruginosa</i> : 50% (<1 CFU/100mL)	Culture	N/A	Italy*	2015 ^f	[261]
DWDS	Municipal water	<i>Mycobacterium mucogenicum</i>	Water: Incoming municipal water linked to one clinical case*	Culture	N/A	Canada*	2017 ^f	[262]
House	Water	<i>L. pneumophila</i>	Water: Hot water tank: 33% (1–100 CFU/mL) Bath: 4% (<50 CFU/mL) Biofilm: 40.9% *	Culture	N/A	Canada	1984	[263]
House	Shower Tap Drain	<i>Stenotrophomonas maltophilia</i>	Biofilm: Tap: 36.3%* Drain: 72%*	Culture	N/A	United Kingdom	1996	[264]

House	Water	<i>P. aeruginosa</i>	Water: 89.5% (4–130 CFU/100mL)	Culture	N/A	Mexico*	2001 ^f	[265]
House	Shower head	<i>Mycobacterium</i> spp.	Biofilm: 100%*	Molecular	N/A	Singapore	2020 ^f	[266]
House	Shower	<i>L. pneumophila</i>	Water: continuously detected for 2.5 yrs (380–600 CFU/L)	Culture	N/A	United Kingdom	2005	[267]
Building	Tap	<i>L. pneumophila</i>	Water: 2.4% (2×10^2 to 3×10^4 CFU/L)	Culture	N/A	England	1986	[268]
DWDS	Municipal water	<i>L. pneumophila</i>	Water: 25% of pre flush* 50% flushed (1– 2100 CFU/25·2mL)	Culture	N/A	USA	2011	[269]
House	Water	<i>Legionella</i> spp.	Water: 8% patient houses (1.3×10^2 to 2.7×10^4 CFU/L) 19% control houses (2.3×10^2 to 5.5×10^4 CFU/L)	Culture and molecular	N/A	Spain	2000	[270]
House	Tap	<i>P. aeruginosa</i>	Not specified	Culture	N/A	India	2012	[271]
House	Tap	<i>L. pneumophila</i>	Water: Residential water linked to 1 clinical case *	Culture	N/A	China*	2002 ^f	[272]
House	Tap	<i>Methylobacterium</i> spp.	Not specified	Culture	N/A	Norway	2019 ^f	[273]
House	Tap	<i>A. hydrophila</i> <i>P. aeruginosa</i>	Water: <i>P. aeruginosa</i> : 100% sites * <i>A. hydrophila</i> : 33% sites *	Molecular	N/A	India	2013	[274]
House	Water	<i>P. aeruginosa</i>	Water: 15% (1–975 CFU/100mL)	Culture	N/A	Mexico	2004	[275]
House	Rainwater	<i>P. aeruginosa</i>	Water: 28% (1–100 CFU/100mL)	Culture	N/A	Mexico	1999 ^f	[276]

House	Tap	<i>Helicobacter pylori</i>	Water: 12.2% *	Molecular	N/A	Peru	2017	[277]
House	Water	<i>Aeromonas</i> spp.	Water: 33.3% *	Culture	N/A	Australia	1984 ^f	[278]
House	Shower	<i>L. pneumophila</i>	Water: 19.6% *(5×10^1 – 26.6×10^3 CFU/mL) Biofilm: 6.5% (2.9×10^3 – 28.6×10^3 CFU/mL)	Culture	N/A	Turkey	2009 ^f	[279]
House	Water	<i>Legionella</i> spp.	Water: Residential water linked to 28 clinical cases *	Culture	N/A	Germany	2016– 2019	[280]
House	Water	NTM	Water: 60% (300 CFU/L)	Culture	N/A	Italy	2010 ^f	[281]
House	Shower Tap	<i>Legionella</i> spp. <i>Pseudomonas</i> spp.	Water: <i>Pseudomonas</i> spp.: 38.4% (1 to 6.4×10^4 CFU/100mL) <i>Legionella</i> spp.: 22.6% (25 to 8.7×10^4 CFU/L)	Culture	N/A	Italy	2002	[282]
House	Tap	<i>Acinetobacter</i> spp. <i>Aeromonas</i> spp. <i>P. aeruginosa</i>	Water: <i>Aeromonas</i> spp.: 12% * <i>Acinetobacter</i> spp.: 1–8% * <i>P. aeruginosa</i> : 6– 40% *	Culture	N/A	Pakistan	1991 ^f	[283]
House	Tap	<i>A. baumannii</i>	Not specified	qPCR	N/A	Cameroon	2014	[284]
House	Water	<i>Aeromonas</i> spp. <i>Legionella</i> spp. <i>Pseudomonas</i> <i>fluorescence</i>	Not specified	Culture	N/A	South Africa	1995 ^f	[285]
House	Water	<i>Mycobacterium</i> spp.	Water:	Culture	N/A	USA	1996	[286]

			NTM: 82% house water* MAC: 22% house water (1–10 ³ CFU/500mL) <i>M. avium</i> : 5% house water* <i>Mycobacterium intracellulare</i> : 13% house water *					
House	Hot water system Tap	<i>L. pneumophila</i>	Water: (1–10 ⁴ CFU/L) 32% hot water Biofilm: 100% tap *	Culture	N/A	USA	1982	[287]
House	Shower Bath	<i>Mycobacterium avium</i> subsp. <i>hominissuis</i>	Biofilm: 33.3% of bath inlet * 4% drain Water: 5.4% of shower *	Culture	N/A	Japan	2019	[288]
House	Tap	<i>P. aeruginosa</i>	Water: 23.3% *	Culture	N/A	United Arab Emirates	2015	[289]
House	Tap Water heater Shower	<i>L. pneumophila</i>	Biofilm: 11.9% shower heads * Water: 17.7% hot water heaters * 19.4% taps * 23% shower heads *	Culture and Immunofluorescence	N/A	Canada*	1989	[290]
House	Water heater Tap Shower	<i>Legionella</i> spp.	Water: 37% hot water heaters * 15% showers * 12% taps *	Culture	N/A	Canada	1991 ^f	[291]

^a Abbreviations: *Mycobacterium avium* complex, MAC; Non-tuberculous mycobacteria, NTM .

b Abbreviations: Fluorescence in situ hybridization, FISH; Immunofluorescence assay, IFA; Polymerase chain reaction, PCR; Point of use, POU; Colony forming unit, CFU. Where the concentration of pathogen was not specified in the article, it was denoted with an asterisk (*).

c Abbreviations: Quantitative polymerase chain reaction, qPCR; drinking water distribution systems (DWDS).

d Abbreviations: Amoxicillin- clavulanic acid, AMC; Ampicillin, AMP; Amoxicillin, AMX; Aztreonam, ATM; Azithromycin, AZM; Ceftazidime, CAZ; Cephalothin, CEF; Cefazolin, CFZ; Chloramphenicol, CHL; Ciprofloxacin, CIP; Cloxacillin, CLOXA; Clarithromycin, CLR; Colistin, COL; Co-trimoxazole, COT; Ceftriaxone, CRO; Cefotaxime, CTX; Doxycycline, DOX; Erythromycin, ERY; Cefoxitin, FOX; Gentamicin, GEN; Imipenem, IPM; Levofloxacin, LVX; Multidrug resistant, MDR; Meropenem, MEM; Minimum inhibitory concentration, MIC; Minocycline, MIN; Moxifloxacin, MXF; Nalidixic acid, NAL; Netilmicin, NET; Penicillin, PEN; Piperacillin, PIP; Polymyxin B, PMB; Resistant, R; Rifampin, RIF; Streptomycin, STR; Trimethoprim-sulfamethoxazole, SXT; Tetracycline, TET; Tigecycline, TGC; Ticarcillin, TIC; Tobramycin, TOB; BioMerieux identification and antibiotic susceptibility testing instrument, VITEK-2; Not applicable, N/A; ^R, Antimicrobial resistance; ^S, Antimicrobial sensitivity; ^I, Intermediate antimicrobial resistance.

e In countries where the study location was not specified in the article, it was assumed that the country of origin was denoted by the country of the authors.

f Where the year of study was not specified in the article, it was assumed that the year of research was denoted by the year of publication.

References

9. Moore, M.R.; Pryor, M.; Fields, B.; Lucas, C.; Phelan, M.; Besser, R.E. Introduction of monochloramine into a municipal water system: Impact on colonization of buildings by *Legionella* spp. *Applied and Environmental Microbiology* **2006**, *72*, 378–383, doi:10.1128/aem.72.1.378-383.2006.
30. Gattlen, J.; Amberg, C.; Zinn, M.; Mauclair, L. Biofilms isolated from washing machines from three continents and their tolerance to a standard detergent. *Biofouling* **2010**, *26*, 873–882, doi:10.1080/08927014.2010.524297.
31. Oxford, J.; Berezin, E.N.; Courvalin, P.; Dwyer, D.; Exner, M.; Jana, L.A.; Kaku, M.; Lee, C.; Letlape, K.; Low, D.E., et al. An international survey of bacterial contamination and householders' knowledge, attitudes and perceptions of hygiene. *Journal of Infection Prevention* **2013**, *14*, 132–138, doi:10.1177/1757177413483346.
32. Ristola, M.; Arbeit, R.D.; Von Reyn, C.F.; Horsburgh, C.R. Isolation of *Mycobacterium avium* from potable water in homes and institutions of patients with HIV infection in Finland and the United States. *BioMed Research International* **2015**, *2015*, 1–3, doi:10.1155/2015/713845.
33. Abubakar, A.A.; Pukuma, M.S.; Abdulazeez, F.B. Frequency of biofilm formation in toothbrushes and wash basin junks. *Annals of Tropical Medicine and Public Health* **2013**, *6*, 55–58, doi:10.4103/1755-6783.115198.
34. Ahmadrabi, R.; Shakibaie, M.R.; Iranmanesh, Z.; Mollaei, H.R.; Sobhanipoor, M.H. Prevalence of mip virulence gene and PCR-base sequence typing of *Legionella pneumophila* from cooling water systems of two cities in Iran. *Virulence* **2016**, *7*, 602–609, doi:10.1080/21505594.2016.1170944.
35. Barna, Z.; Kadar, M.; Kalman, E.; Szax, A.S.; Vargha, M. Prevalence of *Legionella* in premise plumbing in Hungary. *Water Research* **2016**, *90*, 71–78, doi:10.1016/j.watres.2015.12.004.
36. Donohue, M.J.; King, D.; Pfaller, S.; Mistry, J.H. The sporadic nature of *Legionella pneumophila*, *Legionella pneumophila* Sg1 and *Mycobacterium avium* occurrence within residences and office buildings across 36 states in the United States. *Journal of Applied Microbiology* **2019**, *126*, 1568–1579, doi:10.1111/jam.14196.
37. Kobayashi, M.; Oana, K.; Kawakami, Y. Bath water contamination with *Legionella* and nontuberculous mycobacteria in 24-hour home baths, hot springs, and public bathhouses of nagano prefecture, Japan. *Japanese Journal of Infectious Diseases* **2014**, *67*, 276–281, doi:10.7883/yoken.67.276.
38. Mathias, A.J.; Sumitha, B.; Deepa, K.V.; Ramya, C.; Deepashree, G.H.M.; Smitha. Bacterial contamination of drinking water supplies to residential and workplaces of Bangalore. *Ecology, Environment and Conservation* **2007**, *13*, 123–128.
39. Prevost, M.; Rompre, A.; Baribeau, H.; Coallier, J.; Lafrance, P. Service lines: their effect on microbiological quality. *Journal American Water Works Association* **1997**, *89*, 78–91, doi:https://doi.org/10.1002/j.1551-8833.1997.tb08261.x.
40. Rakić, A.; Perić, J.; Štambuk-Giljanović, N.; Mikrut, A.; Bakavić, A.S. *Legionella* species in year-round vs. seasonal accommodation water supply systems. *Archives of Industrial Hygiene and Toxicology* **2011**, *62*, 335–340, doi:10.2478/10004-1254-62-2011-2111.
41. Sanden, G.N.; Morrill, W.E.; Fields, B.S.; Breiman, R.F.; Barbaree, J.M. Incubation of water samples containing amoebae improves detection of *Legionellae* by the culture method. *Applied and Environmental Microbiology* **1992**, *58*, 2001–2004, doi:10.1128/aem.58.6.2001-2004.1992.

42. Watson, C.L.; Owen, R.J.; Said, B.; Lai, S.; Lee, J.V.; Surman-Lee, S.; Nichols, G. Detection of *Helicobacter pylori* by PCR but not culture in water and biofilm samples from drinking water distribution systems in England. *Journal of Applied Microbiology* **2004**, *97*, 690–698, doi:10.1111/j.1365-2672.2004.02360.x.
43. Briancesco, R.; Semproni, M.; Paradiso, R.; Bonadonna, L. Nontuberculous mycobacteria: an emerging risk in engineered environmental habitats. *Annals of Microbiology* **2014**, *64*, 735–740, doi:10.1007/s13213-013-0708-8.
44. Abdel Haleem, A.A.; Hemida, S.K.; Abdellatif, M.M. Evaluation of microorganisms of drinking water of Rafha City, northern borders, Saudi Arabia. *Journal of Pure and Applied Microbiology* **2016**, *10*, 61–71, doi:10.4172/2157-7099.1000417.
45. Dai, D.J.; Rhoads, W.J.; Katner, A.; Strom, L.; Edwards, M.A.; Pruden, A.; Pieper, K.J. Molecular survey of *Legionella* and *Naegleria fowleri* in private well water and premise plumbing following the 2016 Louisiana flood. *Environmental Science-Water Research & Technology* **2019**, *5*, 1464–1477, doi:10.1039/c9ew00109c.
46. Hultén, K.; Enroth, H.; Nyström, T.; Engstrand, L. Presence of *Helicobacter* species DNA in Swedish water. *Journal of Applied Microbiology* **1998**, *85*, 282–286, doi:10.1046/j.1365-2672.1998.00500.x.
47. Katz, M.J.; Parrish, N.M.; Belani, A.; Shah, M. Recurrent *Aeromonas* bacteremia due to contaminated well water. *Open Forum Infectious Diseases* **2015**, *2*, ofv142, doi:10.1093/ofid/ofv142.
48. Mapili, K.; Pieper, K.J.; Dai, D.; Pruden, A.; Edwards, M.A.; Tang, M.; Rhoads, W.J. *Legionella pneumophila* occurrence in drinking water supplied by private wells. *Letters in Applied Microbiology* **2020**, *70*, 232–240, doi:10.1111/lam.13273.
49. Mukhopadhyay, C.; Vishwanath, S.; Eshwara, V.K.; Shankaranarayana, S.A.; Sagir, A. Microbial quality of well water from rural and urban households in Karnataka, India: A cross-sectional study. *Journal of Infection and Public Health* **2012**, *5*, 257–262, doi:10.1016/j.jiph.2012.03.004.
50. Oluyeye, J.O.; Koko, A.E.; Aregbesola, O.A. Bacteriological and physico-chemical quality assessment of household drinking water in Ado-Ekiti, Nigeria. *Water Science and Technology: Water Supply* **2011**, *11*, 79–84, doi:10.2166/ws.2011.011.
51. Xue, J.; Zhang, B.W.; Lamori, J.; Shah, K.; Zabaleta, J.; Garai, J.; Taylor, C.M.; Sherchan, S.P. Molecular detection of opportunistic pathogens and insights into microbial diversity in private well water and premise plumbing. *Journal of Water and Health* **2020**, *18*, 820–834, doi:10.2166/wh.2020.271.
52. Laverdière, M.; Joly, J.R.; Habel, F.; Bernier, F.; Riendeau, G.A.; DeCarolus, E. A sporadic community-acquired legionnaires disease linked to a domestic hot water supply: Report of a documented case. *Infectious Diseases in Clinical Practice* **2001**, *10*, 441–443, doi:10.1097/00019048-200111000-00007.
53. Abera, B.; Kibret, M.; Goshu, G.; Yimer, M. Bacterial quality of drinking water sources and antimicrobial resistance profile of Enterobacteriaceae in Bahir Dar city, Ethiopia. *Journal of Water Sanitation and Hygiene for Development* **2014**, *4*, 384–390, doi:10.2166/washdev.2014.105.
54. Adday, A.O.; Althahab, A.; Alwash, M.S. Assessment of the antibiotic susceptibility and minimum inhibition concentration of *Legionella pneumophila* isolated from different sources in Babylon Province. *Plant Archives* **2019**, *19*, 1107–1110, doi:10.13140/RG.2.2.35423.00162.
55. Koksall, F.; Oguzkurt, N.; Samasti, M.; Altas, K. Prevalence and antimicrobial resistance patterns of *Aeromonas* strains isolated from drinking water samples in Istanbul, Turkey. *Chemotherapy* **2007**, *53*, 30–35, doi:10.1159/000098248.
56. Mombini, S.; Rezatofighi, S.E.; Kiyani, L.; Motamedi, H. Diversity and metallo- β -lactamase-producing genes in *Pseudomonas aeruginosa* strains isolated from filters of household water treatment systems. *Journal of Environmental Management* **2019**, *231*, 413–418, doi:10.1016/j.jenvman.2018.10.068.
57. Obi, C.L.; Ramalivhana, J.; Momba, M.N.B.; Onobolu, B.; Igumbor, J.O.; Lukoto, M.; Mulaudzi, T.B.; Bessong, P.O.; Jansen Van Rensburg, E.L.; Green, E., et al. Antibiotic resistance profiles and relatedness of enteric bacterial pathogens isolated from HIV/AIDS patients with and without diarrhoea and their household drinking water in rural communities in Limpopo Province South Africa. *African Journal of Biotechnology* **2007**, *6*, 1035–1047.
58. Schiavano, G.F.; Carloni, E.; Andreoni, F.; Magi, S.; Chironna, M.; Brandi, G.; Amagliani, G. Prevalence and antibiotic resistance of *Pseudomonas aeruginosa* in water samples in central Italy and molecular characterization of *oprD* in imipenem resistant isolates. *PLoS ONE* **2017**, *12*, doi:10.1371/journal.pone.0189172.
59. Samie, A.; Mashao, M.B.; Bessong, P.O.; Nkgau, T.F.; Momba, M.N.B.; Obi, C.L. Diversity and antibiograms of bacterial organisms isolated from samples of household drinking-water consumed by HIV-positive individuals in rural settings, South Africa. *Journal of Health, Population and Nutrition* **2012**, *30*, 241–249, doi:10.3329/jhpn.v30i3.12286.
60. Zupančič, J.; Turk, M.; Črnigoj, M.; Ambrožič Avguštin, J.; Gunde-Cimerman, N. The dishwasher rubber seal acts as a reservoir of bacteria in the home environment. *BMC Microbiology* **2019**, *19*, doi:10.1186/s12866-019-1674-5.

61. Lucassen, R.; Rehberg, L.; Heyden, M.; Bockmuhl, D. Strong correlation of total phenotypic resistance of samples from household environments and the prevalence of class 1 integrons suggests for the use of the relative prevalence of intI1 as a screening tool for multi-resistance. *Plos One* **2019**, *14*, doi:10.1371/journal.pone.0218277.
62. Maki, A.A. A study of bacterial contamination in different places in house kitchens. *Pollution Research* **2019**, *38*, 862-869.
63. Ma, L.P.; Li, B.; Zhang, T. New insights into antibiotic resistome in drinking water and management perspectives: A metagenomic based study of small-sized microbes. *Water Research* **2019**, *152*, 191-201, doi:10.1016/j.watres.2018.12.069.
64. Schages, L.; Lucassen, R.; Wichern, F.; Kalscheuer, R.; Bockmuhl, D. The household resistome: Frequency of beta-Lactamases, class 1 integrons, and antibiotic-resistant bacteria in the domestic environment and their reduction during automated dishwashing and laundering. *Applied and Environmental Microbiology* **2020**, *86*, 2020-2062, doi:10.1128/aem.02062-20.
65. Alavandi, S.V.; Subashini, M.S.; Ananthan, S. Occurrence of haemolytic and cytotoxic *Aeromonas* species in domestic water supplies in Chennai. *Indian Journal of Medical Research* **1999**, *110*, 50-55.
66. Huminer, D.; Shmuely, H.; Block, C.; Pitlik, S.D. Home shower-bath *Pseudomonas* folliculitis. *Israel Journal of Medical Sciences* **1989**, *25*, 44-45.
67. Watando, A.; Toyota, E.; Mori, N.; Kaneko, A.; Kuratsuji, T.; Kirikae, T.; Kudo, K. Pulmonary *Mycobacterium avium* infection in an immunocompetent young adult related to use of home bath with a circulating water system. *Japanese Journal of Infectious Diseases* **2001**, *54*, 151-152.
68. Botsaris, G.; Kanetis, L.; Slany, M.; Parpouna, C.; Makris, K.C. Microbial quality and molecular identification of cultivable microorganisms isolated from an urban drinking water distribution system (Limassol, Cyprus). *Environmental Monitoring and Assessment* **2015**, *187*, 4957-4959, doi:10.1007/s10661-015-4957-9.
69. Gora, S.L.; Soucie, T.A.; McCormick, N.E.; Ontiveros, C.C.; L'Herauld, V.; Gavin, M.; Trueman, B.F.; Campbell, J.; Stoddart, A.K.; Gagnon, G.A. Microbiological water quality in a decentralized Arctic drinking water system. *Environmental Science-Water Research & Technology* **2020**, *6*, 1855-1868, doi:10.1039/d0ew00019a.
70. Huerta, M.; Castel, H.; Grotto, I.; Shpilberg, O.; Alkan, M.; Harman-Boehm, I. Clinical and epidemiologic investigation of two *Legionella-Rickettsia* co-infections. *Israel Medical Association Journal* **2003**, *5*, 560-563.
71. Payment, P. Bacterial colonization of domestic reverse-osmosis water filtration units. *Canadian Journal of Microbiology* **1989**, *35*, 1065-1067, doi:10.1139/m89-178.
72. Bullin, C.H.; Tanner, E.I.; Collins, C.H. Isolation of *Mycobacterium xenopi* from water taps. *Journal of Hygiene* **1970**, *68*, 97-100, doi:10.1017/S0022172400028540.
73. Kaustova, J.; Charvat, B.; Mudra, R.; Holendova, E. Ostrava - A new endemic focus of *Mycobacteria xenopi* in the Czech Republic. *Central European Journal of Public Health* **1993**, *1*, 35-37.
74. Marciano-Cabral, F.; Jamerson, M.; Kaneshiro, E.S. Free-living amoebae, *Legionella* and *Mycobacterium* in tap water supplied by a municipal drinking water utility in the USA. *Journal of Water and Health* **2010**, *8*, 71-82, doi:10.2166/wh.2009.129.
75. Parashar, D.; Das, R.; Chauhan, D.S.; Sharma, V.D.; Lavania, M.; Yadav, V.S.; Chauhan, S.V.S.; Katoch, V.M. Identification of environmental mycobacteria isolated from Agra, north India by conventional & molecular approaches. *Indian Journal of Medical Research* **2009**, *129*, 424-431.
76. Perez-Martinez, I.; Aguilar-Ayala, D.A.; Fernandez-Rendon, E.; Carrillo-Sanchez, A.K.; Helguera-Repetto, A.C.; Rivera-Gutierrez, S.; Estrada-Garcia, T.; Cerna-Cortes, J.F.; Gonzalez-Y-Merchand, J.A. Occurrence of potentially pathogenic nontuberculous mycobacteria in Mexican household potable water: A pilot study. *BMC Research Notes* **2013**, *6*, doi:10.1186/1756-0500-6-531.
77. Peters, M.; Müller, C.; Rüscher-Gerdes, S.; Seidel, C.; Göbel, U.; Pohle, H.D.; Ruf, B. Isolation of atypical mycobacteria from tap water in hospitals and homes: Is this a possible source of disseminated MAC infection in AIDS patients? *Journal of Infection* **1995**, *31*, 39-44, doi:10.1016/S0163-4453(95)91333-5.
78. Slosarek, M.; Kubin, M.; Pokorny, J. Water is a possible factor of transmission in mycobacterial infections. *Central European Journal of Public Health* **1994**, *2*, 103-105.
79. Slosarek, M.; Kubin, M.; Jaresova, M. Water-borne household infections due to *Mycobacterium xenopi*. *Central European Journal of Public Health* **1993**, *1*, 78-80.
80. Klanicova, B.; Seda, J.; Slana, I.; Slany, M.; Pavlik, I. The tracing of *Mycobacteria* in drinking water supply systems by culture, conventional, and real time PCRs. *Current Microbiology* **2013**, *67*, 725-731, doi:10.1007/s00284-013-0427-1.
81. Falkinham, J.F., III; Williams, M.D.; Kwait, R.; Lande, L. *Methylobacterium* spp. as an indicator for the presence or absence of *Mycobacterium* spp. *International Journal of Mycobacteriology* **2016**, *5*, 240-243, doi:10.1016/j.ijmyco.2016.03.001.
82. Zhang, H.; Xu, L.; Huang, T.; Liu, X.; Miao, Y.; Liu, K.; Qian, X. Indoor heating triggers bacterial ecological links with tap water stagnation during winter: Novel insights into bacterial abundance, community metabolic activity and interactions. *Environmental Pollution* **2021**, *269*, doi:10.1016/j.envpol.2020.116094.

83. Mulchandani, R.; Nilsson, H.O.; Wadstrom, T.; Joshi, B.R. Presence of *Helicobacter pylori* in Mumbai water. *Journal of Pure and Applied Microbiology* **2013**, *7*, 2315–2324.
84. Richards, C.L.; Broadaway, S.C.; Eggers, M.J.; Doyle, J.; Pyle, B.H.; Camper, A.K.; Ford, T.E. Detection of pathogenic and non-pathogenic bacteria in drinking water and associated biofilms on the crow reservation, Montana, USA. *Microbial Ecology* **2018**, *76*, 52–63, doi:10.1007/s00248-015-0595-6.
85. Al-Bahry, S.N.; Elshafie, A.E.; Victor, R.; Mahmoud, I.Y.; Al-Hinai, J.A. Opportunistic pathogens relative to physicochemical factors in water storage tanks. *Journal of Water and Health* **2011**, *9*, 382–393, doi:10.2166/wh.2011.054.
86. Boudouaya, H.A.; Melki, R.; Bouali, A.; Hamal, A.; Boukhatem, N. Prevalence of *Legionella* species in hot water of Moorish baths "Hammams" and domestic bathrooms in Oujda city, Morocco. *Journal of Materials and Environmental Science* **2017**, *8*, 1567–1573.
87. Byrne, B.G.; McColm, S.; McElmurry, S.P.; Kilgore, P.E.; Sobeck, J.; Sadler, R.; Love, N.G.; Swanson, M.S. Prevalence of infection-competent serogroup 6 *Legionella pneumophila* within premise plumbing in southeast Michigan. *mBio* **2018**, *9*, 1–17, doi:10.1128/mBio.00016-18.
88. Collins, S.; Stevenson, D.; Bennett, A.; Walker, J. Occurrence of *Legionella* in UK household showers. *International Journal of Hygiene and Environmental Health* **2017**, *220*, 401–406, doi:10.1016/j.ijheh.2016.12.001.
89. Rakić, A.; Perić, J.; Foglar, L. Influence of temperature, chlorine residual and heavy metals on the presence of *Legionella pneumophila* in hot water distribution systems. *Annals of Agricultural and Environmental Medicine* **2012**, *19*, 431–436.
90. Rakić, A.; Štambuk-Giljanović, N.; Foglar, L. Monitoring *Legionella pneumophila* in drinking water distribution systems in Southern Croatia. *Fresenius Environmental Bulletin* **2013**, *22*, 3390–3397.
91. Rakic, A.; Jurcev-Savicevic, A.; Stambuk-Giljanovic, N. The assessment of the risk factors on *Legionella* spp. presence in public supply water in permanently vs. seasonally open facilities. *Fresenius Environmental Bulletin* **2017**, *26*, 7353–7361.
92. Scaturro, M.; Fontana, S.; Crippa, S.; Caporali, M.G.; Seyler, T.; Veschetti, E.; Villa, G.; Rota, M.C.; Ricci, M.L. An unusually long-lasting outbreak of community-acquired Legionnaires' disease, 2005–2008, Italy. *Epidemiology and Infection* **2015**, *143*, 2416–2425, doi:10.1017/s0950268814003094.
93. Simmons, G.; Jury, S.; Thornley, C.; Harte, D.; Mohiuddin, J.; Taylor, M. A Legionnaires' disease outbreak: A water blaster and roof-collected rainwater systems. *Water Research* **2008**, *42*, 1449–1458, doi:10.1016/j.watres.2007.10.016.
94. Totaro, M.; Costa, A.L.; Frendo, L.; Profeti, S.; Casini, B.; Gallo, A.; Privitera, G.; Baggiani, A. Evaluation of *Legionella* spp. colonization in residential buildings having solar thermal system for hot water production. *International Journal of Environmental Research and Public Health* **2020**, *17*, 1–8, doi:10.3390/ijerph17197050.
95. Totaro, M.; Valentini, P.; Costa, A.L.; Frendo, L.; Cappello, A.; Casini, B.; Miccoli, M.; Privitera, G.; Baggiani, A. Presence of *Legionella* spp. in hot water networks of different Italian residential buildings: A three-year survey. *International Journal of Environmental Research and Public Health* **2017**, *14*, doi:10.3390/ijerph14111296.
96. Pastoris, M.C.; Viganò, E.F.; Passi, C. A family cluster of *Legionella pneumophila* infections. *Scandinavian Journal of Infectious Diseases* **1988**, *20*, 489–493, doi:10.3109/00365548809032496.
97. Ventura, R.J.; Muhi, E.; de los Reyes, V.C.; Sucaldito, M.N.; Tayag, E. A community-based gastroenteritis outbreak after Typhoon Haiyan, Leyte, Philippines, 2013. *Western Pacific surveillance and response journal : WPSAR* **2015**, *6*, 1–6, doi:10.2471/WPSAR.2014.5.1.010.
98. Peter, A.; Routledge, E. Present-day monitoring underestimates the risk of exposure to pathogenic bacteria from cold water storage tanks. *PLoS ONE* **2018**, *13*, doi:10.1371/journal.pone.0195635.
99. Hayes-Phillips, D.; Bentham, R.; Ross, K.; Whiley, H. Factors influencing *legionella* contamination of domestic household showers. *Pathogens* **2019**, *8*, doi:10.3390/pathogens8010027.
100. Ziwa, M.; Jovic, G.; Ngwisha, C.L.T.; Molnar, J.A.; Kwenda, G.; Samutela, M.; Mulowa, M.; Kalumbi, M.M. Common hydrotherapy practices and the prevalence of burn wound bacterial colonisation at the University Teaching Hospital in Lusaka, Zambia. *Burns* **2019**, *45*, 983–989, doi:10.1016/j.burns.2018.11.019.
101. French, G.L.; Otter, J.A.; Shannon, K.P.; Adams, N.M.T.; Watling, D.; Parks, M.J. Tackling contamination of the hospital environment by methicillin-resistant *Staphylococcus aureus* (MRSA): A comparison between conventional terminal cleaning and hydrogen peroxide vapour decontamination. *Journal of Hospital Infection* **2004**, *57*, 31–37, doi:10.1016/j.jhin.2004.03.006.
102. Sexton, J.D.; Tanner, B.D.; Maxwell, S.L.; Gerba, C.P. Reduction in the microbial load on high-touch surfaces in hospital rooms by treatment with a portable saturated steam vapor disinfection system. *American Journal of Infection Control* **2011**, *39*, 655–662, doi:10.1016/j.ajic.2010.11.009.

103. Kim, B.-R.; Bae, Y.-M.; Lee, S.-Y. Effect of environmental conditions on biofilm formation and related characteristics of *Staphylococcus aureus*. *Journal of Food Safety* **2016**, *36*, 412–422, doi:https://doi.org/10.1111/jfs.12263.
104. Neopane, P.; Nepal, H.P.; Shrestha, R.; Uehara, O.; Abiko, Y. In vitro biofilm formation by *Staphylococcus aureus* isolated from wounds of hospital-admitted patients and their association with antimicrobial resistance. *International journal of general medicine* **2018**, *11*, 25–32, doi:10.2147/IJGM.S153268.
105. Buzón-Durán, L.; Alonso-Calleja, C.; Riesco-Peláez, F.; Capita, R. Effect of sub-inhibitory concentrations of biocides on the architecture and viability of MRSA biofilms. *Food Microbiology* **2017**, *65*, 294–301, doi:https://doi.org/10.1016/j.fm.2017.01.003.
106. Speck, S.; Wenke, C.; Feßler, A.T.; Kacza, J.; Geber, F.; Scholtzek, A.D.; Hanke, D.; Eichhorn, I.; Schwarz, S.; Rosolowski, M., et al. Borderline resistance to oxacillin in *Staphylococcus aureus* after treatment with sub-lethal sodium hypochlorite concentrations. *Heliyon* **2020**, *6*, e04070–e04070, doi:10.1016/j.heliyon.2020.e04070.
107. Diaper, J.P.; Edwards, C. Survival of *Staphylococcus aureus* in lakewater monitored by flow cytometry. *Microbiology* **1994**, *140*, 35–42, doi:https://doi.org/10.1099/13500872-140-1-35.
108. Watson Sean, P.; Clements Mark, O.; Foster Simon, J. Characterization of the starvation-survival response of *Staphylococcus aureus*. *Journal of Bacteriology* **1998**, *180*, 1750–1758, doi:10.1128/JB.180.7.1750-1758.1998.
109. Huws, S.A.; Smith, A.W.; Enright, M.C.; Wood, P.J.; Brown, M.R. Amoebae promote persistence of epidemic strains of MRSA. *Environmental Microbiology* **2006**, *8*, 1130–1133, doi:10.1111/j.1462-2920.2006.00991.x.
110. Settanni, L.; Gaglio, R.; Stucchi, C.; De Martino, S.; Francesca, N.; Moschetti, G. Presence of pathogenic bacteria in ice cubes and evaluation of their survival in different systems. *Annals of Microbiology* **2017**, *67*, 827–835, doi:10.1007/s13213-017-1311-1.
119. Skogberg, K.; Nuorti, J.P.; Saxen, H.; Kusnetsov, J.; Mentula, S.; Fellman, V.; Maki-Petays, N.; Jousimies-Somer, H. A newborn with domestically acquired Legionnaires disease confirmed by molecular typing. *Clinical Infectious Diseases* **2002**, *35*, E82–E85, doi:10.1086/342886.
120. Bates, M.N.; Maas, E.; Martin, T.; Harte, D.; Grubner, M.; Margolin, T. Investigation of the prevalence of *Legionella* species in domestic hot water systems. *New Zealand Medical Journal* **2000**, *113*, 218–220.
121. Martinelli, F.; Caruso, A.; Moschini, L.; Turano, A.; Scarcella, C.; Speziani, F. A comparison of *Legionella pneumophila* occurrence in hot water tanks and instantaneous devices in domestic, nosocomial, and community environments. *Current Microbiology* **2000**, *41*, 374–376, doi:10.1007/s002840010152.
124. Mathys, W.; Stanke, J.; Harmuth, M.; Junge-Mathys, E. Occurrence of *Legionella* in hot water systems of single-family residences in suburbs of two German cities with special reference to solar and district heating. *International Journal of Hygiene and Environmental Health* **2008**, *211*, 179–185, doi:10.1016/j.ijheh.2007.02.004.
127. Chaidez, C.; Gerba, C.P. Comparison of the microbiologic quality of point-of-use (POU)-treated water and tap water. *International Journal of Environmental Health Research* **2004**, *14*, 253–260, doi:10.1080/09603120410001725595.
128. Josephson, K.L.; Rubino, J.R.; Pepper, I.L. Characterization and quantification of bacterial pathogens and indicator organisms in household kitchens with and without the use of a disinfectant cleaner *Journal of Applied Microbiology* **1997**, *83*, 737–750, doi:10.1046/j.1365-2672.1997.00308.x.
132. Von Baum, H.; Bommer, M.; Forke, A.; Holz, J.; Frenz, P.; Wellinghausen, N. Is domestic tap water a risk for infections in neutropenic patients? *Infection* **2010**, *38*, 181–186, doi:10.1007/s15010-010-0005-4.
136. Marshall, H.M.; Carter, R.; Torbey, M.J.; Minion, S.; Tolson, C.; Sidjabat, H.E.; Huygens, F.; Hargreaves, M.; Thomson, R.M. *Mycobacterium lentiflavum* in drinking water supplies, Australia. *Emerging Infectious Diseases* **2011**, *17*, 395–402, doi:10.3201/eid1703.090948.
141. Pellizari, V.H.; Martins, M.T. Occurrence of *Legionella* sp in water samples from man-made systems of Sao Paulo Brazil. *Revista De Microbiologia* **1995**, *26*, 186–191.
147. Buchbinder, S.; Trebesius, K.; Heesemann, J. Evaluation of detection of *Legionella* spp. in water samples by fluorescence in situ hybridization, PCR amplification and bacterial culture. *International Journal of Medical Microbiology* **2002**, *292*, 241–245, doi:10.1078/1438-4221-00213.
155. Erdoğan, H.; Arslan, H. Domestically acquired legionnaires' disease: Two case reports and a review of the pertinent literature. *Balkan Medical Journal* **2016**, *33*, 350–353, doi:10.5152/balkanmedj.2016.150529.
156. Falkinham Iii, J.O.; Iseman, M.D.; de Haas, P.; van Soolingen, D. *Mycobacterium avium* in a shower linked to pulmonary disease. *Journal of Water and Health* **2008**, *6*, 209–213, doi:10.2166/wh.2008.232.

157. Leverstein van Hall, M.A.; Verbon, A.; Huisman, M.V.; Kuijper, E.J.; Dankert, J. Reinfection with *Legionella pneumophila* documented by pulsed-field gel electrophoresis. *Clinical Infectious Diseases* **1994**, *19*, 1147–1149, doi:10.1093/clinids/19.6.1147.
158. Lück, P.C.; Leupold, I.; Hlawitschka, M.; Helbig, J.H.; Carmienke, I.; Jatzwauk, L.; Guderitz, T. Prevalence of *Legionella* species, serogroups, and monoclonal subgroups in hot water systems in south-eastern Germany. *Zentralblatt für Hygiene und Umweltmedizin = International journal of hygiene and environmental medicine* **1993**, *193*, 450–460.
159. Moran-Gilad, J.; Lazarovitch, T.; Mentasti, M.; Harrison, T.; Weinberger, M.; Mordish, Y.; Mor, Z.; Stocki, T.; Anis, E.; Sadik, C., et al. Humidifier-associated paediatric Legionnaires' disease, Israel, February 2012. *Eurosurveillance* **2012**, *17*, 2–5.
160. Ryu, S.; Yang, K.; Chun, B.C. Community-acquired Legionnaires' disease in a newly constructed apartment building. *Journal of Preventive Medicine and Public Health* **2017**, *50*, 274–277, doi:10.3961/jpmph.17.066.
161. Sax, H.; Dharan, S.; Pittet, D. Legionnaires' disease in a renal transplant recipient: Nosocomial or home-grown? *Transplantation* **2002**, *74*, 890–892, doi:10.1097/00007890-200209270-00028.
162. Schumacher, A.; Kocharian, A.; Koch, A.; Marx, J. Fatal case of Legionnaires' disease after home exposure to *Legionella pneumophila* serogroup 3 - Wisconsin, 2018. *MMWR. Morbidity and mortality weekly report* **2020**, *69*, 207–211, doi:10.15585/mmwr.mm6908a2.
163. Stout, J.E.; Li, V.L.; Muraca, P. Legionnaires' disease acquired within the homes of two patients: link to the home water supply. *JAMA: The Journal of the American Medical Association* **1987**, *257*, 1215–1217, doi:10.1001/jama.1987.03390090087029.
164. Stout, J.E.; yu, V.L.; Muraca, P.; Joly, J.; Troup, N.; Tompkins, L.S. Potable water as a cause of sporadic cases of community-acquired legionnaires' disease. *New England Journal of Medicine* **1992**, *326*, 151–155, doi:10.1056/NEJM199201163260302.
165. Young, M.; Smith, H.; Gray, B.; Huang, B.; Barten, J.; Towner, C.; Plowman, S.; Afshar, B.; Fry, N.; Blair, B., et al. The public health implications of a sporadic case of culture-proven Legionnaires' disease. *Australian and New Zealand Journal of Public Health* **2005**, *29*, 513–517, doi:10.1111/j.1467-842X.2005.tb00241.x.
171. Zietz, B.; Wiese, J.; Brengelmann, F.; Dunkelberg, H. Presence of Legionellaceae in warm water supplies and typing of strains by polymerase chain reaction. *Epidemiology and Infection* **2001**, *126*, 147–152, doi:10.1017/s0950268801005015.
172. Zhu, J.; Liu, R.; Cao, N.; Yu, J.; Liu, X.; Yu, Z. Mycobacterial metabolic characteristics in a water meter biofilm revealed by metagenomics and metatranscriptomics. *Water Research* **2019**, *153*, 315–323, doi:10.1016/j.watres.2019.01.032.
173. Yajko, D.M.; Chin, D.P.; Gonzalez, P.C.; Nassos, P.S.; Hopewell, P.C.; Reingold, A.L.; Horsburgh Jr, C.R.; Yakus, M.A.; Ostroff, S.M.; Hadley, W.K. *Mycobacterium avium* complex in water, food, and soil samples collected from the environment of HIV-infected individuals. *Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology* **1995**, *9*, 176–182.
174. Whitby, J.L.; Rampling, A. *Pseudomonas aeruginosa* contamination in domestic and hospital environments. *The Lancet* **1972**, *299*, 15–17, doi:10.1016/S0140-6736(72)90006-2.
175. Wallet, F.; Emery, C.; Briand, E.; Cabanes, P.A. Prevalence of *Legionella* in domestic hot water systems in homes in France. *Environnement, Risques et Sante* **2016**, *15*, 29–38, doi:10.1684/ers.2016.0835.
176. Wallace Jr, R.J.; Iakhiaeva, E.; Williams, M.D.; Brown-Elliott, B.A.; Vasireddy, S.; Vasireddy, R.; Lande, L.; Peterson, D.D.; Sawicki, J.; Kwait, R., et al. Absence of *Mycobacterium intracellulare* and presence of *Mycobacterium chimaera* in household water and biofilm samples of patients in the United States with *Mycobacterium avium* complex respiratory disease. *J Clin Microbiol* **2013**, *51*, 1747–1752, doi:10.1128/JCM.00186-13.
177. Vornhagen, J.; Stevens, M.; McCormick, D.W.; Dowd, S.E.; Eisenberg, J.N.S.; Boles, B.R.; Rickard, A.H. Coaggregation occurs amongst bacteria within and between biofilms in domestic showerheads. *Biofouling* **2013**, *29*, 53–68, doi:10.1080/08927014.2012.744395.
178. von Reyn, C.F.; Arbeit, R.D.; Horsburgh, C.R.; Ristola, M.A.; Waddell, R.D.; Tvaroha, S.M.; Samore, M.; Hirschhorn, L.R.; Lumio, J.; Lein, A.D., et al. Sources of disseminated *Mycobacterium avium* infection in AIDS. *Journal of Infection* **2002**, *44*, 166–170, doi:10.1053/jinf.2001.0950.
179. Verhoef, L.P.B.; Yzerman, E.P.F.; Bruin, J.P.; Den Boer, J.W. Domestic exposure to legionellae for Dutch Legionnaires' disease patients. *Archives of Environmental Health* **2004**, *59*, 597–603, doi:10.1080/00039890409603439.
180. Vaz-Moreira, I.; Egas, C.; Nunes, O.C.; Manaia, C.M. Bacterial diversity from the source to the tap: a comparative study based on 16S rRNA gene-DGGE and culture-dependent methods. *Fems Microbiology Ecology* **2013**, *83*, 361–374, doi:10.1111/1574-6941.12002.

181. Van Ingen, J.; Blaak, H.; De Beer, J.; De Roda Husman, A.M.; Van Soolingen, D. Rapidly growing nontuberculous mycobacteria cultured from home tap and shower water. *Applied and Environmental Microbiology* **2010**, *76*, 6017–6019, doi:10.1128/AEM.00843-10.
182. Van Assche, A.; Crauwels, S.; De Brabanter, J.; Willems, K.A.; Lievens, B. Characterization of the bacterial community composition in water of drinking water production and distribution systems in Flanders, Belgium. *MicrobiologyOpen* **2019**, *8*, doi:10.1002/mbo3.726.
183. Tzou, C.L.; Dirac, M.A.; Becker, A.L.; Beck, N.K.; Weigel, K.M.; Meschke, J.S.; Cangelosi, G.A. Association between *Mycobacterium avium* complex pulmonary disease and mycobacteria in home water and soil a case-control study. *Annals of the American Thoracic Society* **2020**, *17*, 57–62, doi:10.1513/AnnalsATS.201812-915OC.
184. Tomari, K.; Morino, S.; Horikoshi, Y. Case of infantile *Legionella pneumonia* after bathing in reheated and reused water. *Pediatric Infectious Disease Journal* **2018**, *37*, 370–372, doi:10.1097/INF.0000000000001755.
185. Tokajian, S.; Hashwa, F. Microbiological quality and genotypic speciation of heterotrophic bacteria isolated from potable water stored in household tanks. *Water Quality Research Journal of Canada* **2004**, *39*, 64–73.
186. Tichenor, W.S.; Thurlow, J.; McNulty, S.; Brown-Elliott, B.A.; Wallace Jr, R.J.; Falkinham, J.O. Nontuberculous mycobacteria in household plumbing as possible cause of chronic rhinosinusitis. *Emerging Infectious Diseases* **2012**, *18*, 1612–1617, doi:10.3201/eid1810.120164.
187. Thomson, R.; Tolson, C.; Carter, R.; Coulter, C.; Huygens, F.; Hargreaves, M. Isolation of nontuberculous mycobacteria (NTM) from household water and shower aerosols in patients with pulmonary disease caused by NTM. *J Clin Microbiol* **2013**, *51*, 3006–3011, doi:10.1128/JCM.00899-13.
188. Takahara, M.; Kano, T.; Aiyoshi, M.; Fujino, T.; Otsuka, Y.; Saruta, K.; Kuratsuji, T.; Kirikae, T. Pulmonary *Mycobacterium avium* infection in an immunocompetent aged woman related to use of home bath with a circulating water system. *Japanese Journal of Infectious Diseases* **2002**, *55*, 213–214.
189. Straus, W.L.; Plouffe, J.F.; File, T.M.; Lipman, H.B.; Hackman, B.H.; Salstrom, S.J.; Benson, R.F.; Breiman, R.F.; Baird, I.; Emerick, J., et al. Risk factors for domestic acquisition of Legionnaires disease. *Archives of Internal Medicine* **1996**, *156*, 1685–1692, doi:10.1001/archinte.156.15.1685.
190. Stout, J.E.; Yu, V.L.; Yee, Y.C.; Vaccarello, S.; Diven, W.; Lee, T.C. *Legionella pneumophila* in residential water supplies: Environmental surveillance with clinical assessment for Legionnaires' disease. *Epidemiology and Infection* **1992**, *109*, 49–57.
191. Stojek, N.M.; Dutkiewicz, J. Co-existence of *Legionella* and other Gram-negative bacteria in potable water from various rural and urban sources. *Annals of Agricultural and Environmental Medicine* **2011**, *18*, 330–334.
192. Stephens, F.R. *Legionella* in domestic hot water systems: Out of 40 samples drawn from hot water cylinders, two (5%) were found to be contaminated with *Legionella* which was significantly less than the 50–70% found in larger hot water systems. *Building Research & Information* **1992**, *20*, 96–101, doi:10.1080/09613219208727184.
193. Speirs, J.P.; Anderton, A.; Anderson, J.G. A study of the microbial content of the domestic kitchen. *International Journal of Environmental Health Research* **1995**, *5*, 109–122, doi:10.1080/09603129509356839.
194. Slade, P.J.; Falah, M.A.; Alghady, A.M.R. Isolation of *Aeromonas hydrophila* from bottled waters and domestic water-supplies in Saudi Arabia. *Journal of Food Protection* **1986**, *49*, 471–476, doi:10.4315/0362-028x-49.6.471.
195. Silk, B.J.; Foltz, J.L.; Ngamsnga, K.; Brown, E.; Muñoz, M.G.; Hampton, L.M.; Jacobs-Slifka, K.; Kozak, N.A.; Underwood, J.M.; Krick, J., et al. Legionnaires' disease case-finding algorithm, attack rates, and risk factors during a residential outbreak among older adults: An environmental and cohort study. *BMC Infectious Diseases* **2013**, *13*, doi:10.1186/1471-2334-13-291.
196. Scott, E.; Duty, S.; McCue, K. A critical evaluation of methicillin-resistant *Staphylococcus aureus* and other bacteria of medical interest on commonly touched household surfaces in relation to household demographics. *American Journal of Infection Control* **2009**, *37*, 447–453, doi:10.1016/j.ajic.2008.12.001.
197. Scott, E.; Bloomfield, S.F. An investigation of microbial contamination in the home. *Journal of Hygiene* **1982**, *89*, 279–293, doi:10.1017/S0022172400070819.
198. Schulze-Robbeke, R.; Hartemann, P.; Fimmers, R.; Hagenau, C. Comparison of membrane filtration methods for the recovery of legionellae from naturally contaminated domestic drinking water supplies. *Zentralblatt Fur Hygiene Und Umweltmedizin* **1999**, *202*, 51–59, doi:10.1016/s0934-8859(99)80053-4.
199. Schulze-Röbbecke, R.; Janning, B.; Fischeder, R. Occurrence of mycobacteria in biofilm samples. *Tubercle and Lung Disease* **1992**, *73*, 141–144, doi:10.1016/0962-8479(92)90147-C.
200. Schelstraete, P.; Van Daele, S.; De Boeck, K.; Proesmans, M.; Lebecque, P.; Leclercq-Foucart, J.; Malfroot, A.; Vaneechoutte, M.; De Baets, F. *Pseudomonas aeruginosa* in the home environment of newly infected cystic fibrosis patients. *European Respiratory Journal* **2008**, *31*, 822–829, doi:10.1183/09031936.00088907.

201. Rhodes, G.; Richardson, H.; Hermon-Taylor, J.; Weightman, A.; Higham, A.; Pickup, R. *Mycobacterium avium* subspecies paratuberculosis: Human exposure through environmental and domestic aerosols. *Pathogens* **2014**, *3*, 577–595, doi:10.3390/pathogens3030577.
202. Rhoads, W.J.; Bradley, T.N.; Mantha, A.; Buttlings, L.; Keane, T.; Pruden, A.; Edwards, M.A. Residential water heater cleaning and occurrence of *Legionella* in Flint, MI. *Water Research* **2020**, *171*, doi:10.1016/j.watres.2019.115439.
203. Remold, S.K.; Brown, C.K.; Farris, J.E.; Hundley, T.C.; Perpich, J.A.; Purdy, M.E. Differential habitat use and niche partitioning by *Pseudomonas* species in human homes. *Microbial Ecology* **2011**, *62*, 505–517, doi:10.1007/s00248-011-9844-5.
204. Regnath, T.; Kreutzberger, M.; Illing, S.; Oehme, R.; Liesenfeld, O. Prevalence of *Pseudomonas aeruginosa* in households of patients with cystic fibrosis. *International Journal of Hygiene and Environmental Health* **2004**, *207*, 585–588, doi:10.1078/1438-4639-00331.
205. Ramalingam, B.; Sekar, R.; Boxall, J.B.; Biggs, C.A. Aggregation and biofilm formation of bacteria isolated from domestic drinking water. *Water Science and Technology: Water Supply* **2013**, *13*, 1016–1023, doi:10.2166/ws.2013.115.
206. Raghupathi, P.K.; Zupančič, J.; Brejnrod, A.D.; Jacquiod, S.; Houf, K.; Burmølle, M.; Gunde-Cimerman, N.; Sørensen, S.J. Microbial diversity and putative opportunistic pathogens in dishwasher biofilm communities. *Applied and Environmental Microbiology* **2018**, *84*, doi:10.1128/AEM.02755-17.
207. Purdy-Gibson, M.E.; France, M.; Hundley, T.C.; Eid, N.; Remold, S.K. *Pseudomonas aeruginosa* in CF and non-CF homes is found predominantly in drains. *Journal of Cystic Fibrosis* **2015**, *14*, 341–346, doi:10.1016/j.jcf.2014.10.008.
208. Pierre, D.; Baron, J.L.; Ma, X.; Sidari, F.P., III; Wagener, M.M.; Stout, J.E. Water quality as a predictor of *Legionella* positivity of building water systems. *Pathogens* **2019**, *8*, doi:10.3390/pathogens8040295.
209. Pieri, P.; Andra, S.S.; Charisiadis, P.; Demetriou, G.; Zambakides, N.; Makris, K.C. Variability of tap water residual chlorine and microbial counts at spatially resolved points of use. *Environmental Engineering Science* **2014**, *31*, 193–201, doi:10.1089/ees.2013.0480.
210. Pastoris, M.C.; Piscina, A.; Zanasi, A.; Frisoni, M.N. Home *Legionella* infection: A case report. *IRCS Medical Science* **1986**, *14*, 1017.
211. Omezuruike, O.I.; Damilola, A.O.; Adeola, O.T.; Fajobi, E.A.; Shittu, O.B. Microbiological and physicochemical analysis of different water samples used for domestic purposes in Abeokuta and Ojota, Lagos State, Nigeria. *African Journal of Biotechnology* **2008**, *7*, 617–621.
212. Okpara, J.; Maiwald, M.; Borneff, M.; Windeler, J.; Sonntag, H.G. Evaluation of a new version of the EnviroAmp(TM) *Legionella* kit for the detection of legionellae in water samples by the polymerase chain reaction. *Zentralblatt Fur Hygiene Und Umweltmedizin* **1996**, *198*, 502–513.
213. Ojima, M.; Toshima, Y.; Koya, E.; Ara, K.; Tokuda, H.; Kawai, S.; Kasuga, F.; Ueda, N. Hygiene measures considering actual distributions of microorganisms in Japanese households. *Journal of Applied Microbiology* **2002**, *93*, 800–809, doi:10.1046/j.1365-2672.2002.01746.x.
214. Ojima, M.; Toshima, Y.; Koya, E.; Ara, K.; Kawai, S.; Ueda, N. Bacterial contamination of Japanese households and related concern about sanitation. *International Journal of Environmental Health Research* **2002**, *12*, 41–52, doi:10.1080/09603120120110040.
215. Obi, C.L.; Ramalivhana, J.; Momba, M.N.B.; Igumbor, J. Scope and frequency of enteric bacterial pathogens isolated from HIV/AIDS patients and their household drinking water in Limpopo Province. *Water SA* **2007**, *33*, 539–548.
216. Nishiuchi, Y.; Maekura, R.; Kitada, S.; Tamaru, A.; Taguri, T.; Kira, Y.; Hiraga, T.; Hirotsu, A.; Yoshimura, K.; Miki, M., et al. The recovery of *Mycobacterium avium*-intracellulare complex (MAC) from the residential bathrooms of patients with pulmonary MAC. *Clinical Infectious Diseases* **2007**, *45*, 347–351, doi:10.1086/519383.
217. Napoli, C.; Fasano, F.; Iatta, R.; Barbuti, G.; Cuna, T.; Montagna, M.T. *Legionella* spp. and legionellosis in southeastern Italy: disease epidemiology and environmental surveillance in community and health care facilities. *Bmc Public Health* **2010**, *10*, doi:10.1186/1471-2458-10-660.
218. Montagna, M.T.; Napoli, C.; Tatò, D.; Spilotros, G.; Barbuti, G.; Barbuti, S. Clinical-environmental surveillance of legionellosis: An experience in Southern Italy. *European Journal of Epidemiology* **2006**, *21*, 325–331, doi:10.1007/s10654-006-0009-7.
219. Mohanty, P.S.; Naaz, F.; Katara, D.; Misba, L.; Kumar, D.; Dwivedi, D.K.; Tiwari, A.K.; Chauhan, D.S.; Bansal, A.K.; Tripathy, S.P., et al. Viability of *Mycobacterium leprae* in the environment and its role in leprosy dissemination. *Indian Journal of Dermatology Venereology & Leprology* **2016**, *82*, 23–27, doi:10.4103/0378-6323.168935.
220. Miyagi, K.; Sano, K.; Hirai, I. Sanitary evaluation of domestic water supply facilities with storage tanks and detection of *Aeromonas*, enteric and related bacteria in domestic water facilities in Okinawa Prefecture of Japan. *Water Research* **2017**, *119*, 171–177, doi:10.1016/j.watres.2017.04.002.

221. McBain, A.J.; Bartolo, R.G.; Catrenich, C.E.; Charbonneau, D.; Ledder, R.G.; Rickard, A.H.; Symmons, S.A.; Gilbert, P. Microbial characterization of biofilms in domestic drains and the establishment of stable biofilm microcosms. *Applied and Environmental Microbiology* **2003**, *69*, 177–185, doi:10.1128/aem.69.1.177-185.2003.
222. Marras, T.K.; Wallace, R.J.; Koth, L.L.; Stulbarg, M.S.; Cowl, C.T.; Daley, C.L. Hypersensitivity pneumonitis reaction to *Mycobacterium avium* in household water. *Chest* **2005**, *127*, 664–671, doi:10.1378/chest.127.2.664.
223. MacMartin, T.L.; Graham, C.I.; Farenhorst, A.; Brassinga, A.K.C. Complete genome sequences of two environmental *Legionella* isolates obtained from potable water sourced in a first nation community. *Microbiology Resource Announcements* **2021**, *10*, doi:10.1128/MRA.01237-20.
224. Lührig, K.; Canbäck, B.; Paul, C.J.; Johansson, T.; Persson, K.M.; Rådström, P. Bacterial community analysis of drinking water biofilms in southern Sweden. *Microbes and Environments* **2015**, *30*, 99–107, doi:10.1264/jisme2.ME14123.
225. Lück, P.C.; Schneider, T.; Wagner, J.; Walther, I.; Reif, U.; Weber, S.; Weist, K. Community-acquired Legionnaires' disease caused by *Legionella pneumophila* serogroup 10 linked to the private home. *Journal of Medical Microbiology* **2008**, *57*, 240–243, doi:10.1099/jmm.0.47382-0.
226. Liu, G.; Tao, Y.; Zhang, Y.; Lut, M.; Knibbe, W.J.; van der Wielen, P.; Liu, W.; Medema, G.; van der Meer, W. Hotspots for selected metal elements and microbes accumulation and the corresponding water quality deterioration potential in an unchlorinated drinking water distribution system. *Water Research* **2017**, *124*, 435–445, doi:10.1016/j.watres.2017.08.002.
227. Lin, W.F.; Ye, C.S.; Gu, L.Z.; Hu, D.; Yu, X. Analysis of microbial contamination of household water purifiers. *Applied Microbiology and Biotechnology* **2020**, *104*, 4533–4545, doi:10.1007/s00253-020-10510-5.
228. Lienard, J.; Croxatto, A.; Gervais, A.; Lévi, Y.; Loret, J.F.; Posfay-Barbe, K.M.; Greub, G. Prevalence and diversity of Chlamydiales and other amoeba-resisting bacteria in domestic drinking water systems. *New Microbes and New Infections* **2017**, *15*, 107–116, doi:10.1016/j.nmni.2016.10.003.
229. Levesque, B.; Simard, P.; Gauvin, D.; Gingras, S.; Dewailly, E.; Letarte, R. Comparison of the microbiological quality of water coolers and that of municipal water systems. *Applied and Environmental Microbiology* **1994**, *60*, 1174–1178, doi:10.1128/aem.60.4.1174-1178.1994.
230. Leoni, E.; De Luca, G.; Legnani, P.P.; Sacchetti, R.; Stampi, S.; Zanetti, F. *Legionella* waterline colonization: detection of *Legionella* species in domestic, hotel and hospital hot water systems. *Journal of Applied Microbiology* **2005**, *98*, 373–379, doi:10.1111/j.1365-2672.2004.02458.x.
231. Lecuona, M.; Abreu, R.; Rodríguez-Álvarez, C.; Castro, B.; Campos, S.; Hernández-Porto, M.; Mendoza, P.; Arias, A. First isolation of *Mycobacterium canariensis* from municipal water supplies in Tenerife, Canary Islands, Spain. *International Journal of Hygiene and Environmental Health* **2016**, *219*, 48–52, doi:10.1016/j.ijheh.2015.08.005.
232. Lande, L.; Alexander, D.C.; Wallace, R.J., Jr.; Kwait, R.; Iakhiaeva, E.; Williams, M.; Cameron, A.D.S.; Olshefsky, S.; Devon, R.; Vasireddy, R., et al. *Mycobacterium avium* in community and household water, suburban Philadelphia, Pennsylvania, USA, 2010–2012. *Emerging Infectious Diseases* **2019**, *25*, 473–481, doi:10.3201/eid2503.180336.
233. Kuroki, T.; Watanabe, Y.; Teranishi, H.; Izumiyama, S.; Amemura-Maekawa, J.; Kura, F. *Legionella* prevalence and risk of legionellosis in Japanese households. *Epidemiology and Infection* **2017**, *145*, 1398–1408, doi:10.1017/s0950268817000036.
234. Kohnen, W.; Teske-Keiser, S.; Meyer, H.G.; Loos, A.H.; Pietsch, M.; Jansen, B. Microbiological quality of carbonated drinking water produced with in-home carbonation systems. *International Journal of Hygiene and Environmental Health* **2005**, *208*, 415–423, doi:10.1016/j.ijheh.2005.04.008.
235. Kim, T.; Lye, D.; Donohue, M.; Mistry, J.H.; Pfaller, S.; Vesper, S.; Kirisits, M.J. Harvested rainwater quality before and after treatment and distribution in residential systems. *Journal - American Water Works Association* **2016**, *108*, E571–E584, doi:10.5942/jawwa.2016.108.0182.
236. Jones, F.; Ashcroft, C. Survey to detect *Legionella pneumophila* in potable waters in north west England. *Water and Environment Journal* **1988**, *2*, 460–464, doi:10.1111/j.1747-6593.1988.tb01325.x.
237. Joly, J. *Legionella* and domestic water heaters in the Quebec City area. *Canadian Medical Association Journal* **1985**, *132*, 160.
238. Jiang, L.; Zhao, S.; Cai, X.; Mu, D.; Zhang, X.; Kang, J.; Zhao, L.; Chen, Y. Sequence-based typing of clinical and environmental *Legionella pneumophila* isolates in Shenyang, China. *Enfermedades Infecciosas y Microbiología Clínica* **2020**, *10.1016/j.eimc.2020.06.012*, doi:10.1016/j.eimc.2020.06.012.
239. Islam, M.A.; Sakakibara, H.; Karim, M.R.; Sekine, M.; Mahmud, Z.H. Bacteriological assessment of drinking water supply options in coastal areas of Bangladesh. *Journal of Water and Health* **2011**, *9*, 415–428, doi:10.2166/wh.2011.114.
240. Ishimaru, N.; Suzuki, H.; Tokuda, Y.; Takano, T. Severe Legionnaires' disease with pneumonia and biopsy-confirmed myocarditis most likely caused by *Legionella pneumophila* serogroup 6. *Internal Medicine* **2012**, *51*, 3207–3212, doi:10.2169/internalmedicine.51.7952.

241. Isaac, T.S.; Sherchan, S.P. Molecular detection of opportunistic premise plumbing pathogens in rural Louisiana's drinking water distribution system. *Environmental Research* **2020**, *181*, doi:10.1016/j.envres.2019.108847.
242. Ichijo, T.; Izumi, Y.; Nakamoto, S.; Yamaguchi, N.; Nasu, M. Distribution and respiratory activity of mycobacteria in household water system of healthy volunteers in Japan. *PLoS ONE* **2014**, *9*, doi:10.1371/journal.pone.0110554.
243. Iakhiaeva, E.; Howard, S.T.; Brown Elliott, B.A.; McNulty, S.; Newman, K.L.; Falkinham Iii, J.O.; Williams, M.; Kwait, R.; Lande, L.; Vasireddy, R., et al. Variable-number tandem-repeat analysis of respiratory and household water biofilm isolates of "*Mycobacterium avium* subsp. *hominissuis*" with establishment of a PCR database. *J Clin Microbiol* **2016**, *54*, 891-901, doi:10.1128/JCM.02409-15.
244. Hull, N.M.; Reens, A.L.; Robertson, C.E.; Stanish, L.F.; Harris, J.K.; Stevens, M.J.; Frank, D.N.; Kotter, C.; Pace, N.R. Molecular analysis of single room humidifier bacteriology. *Water Research* **2015**, *69*, 318-327, doi:10.1016/j.watres.2014.11.024.
245. Honda, J.R.; Hasan, N.A.; Davidson, R.M.; Williams, M.D.; Epperson, L.E.; Reynolds, P.R.; Smith, T.; Iakhiaeva, E.; Bankowski, M.J.; Wallace, R.J., Jr., et al. Environmental nontuberculous Mycobacteria in the Hawaiian Islands. *PLoS Neglected Tropical Diseases* **2016**, *10*, doi:10.1371/journal.pntd.0005068.
246. Hankwitz, P.E.; Cervia, J.S.; Thomas, C.F.; Fink, J.N.; Marras, T.; Tomic, R. Nontuberculous mycobacterial hypersensitivity pneumonitis related to a home shower: Treatment and secondary prevention. *BMJ Case Reports* **2011**, 10.1136/bcr.06.2011.4360, doi:10.1136/bcr.06.2011.4360.
247. Haig, S.J.; Kotlarz, N.; Kalikin, L.M.; Chen, T.; Guikema, S.; LiPuma, J.J.; Raskin, L. Emerging investigator series: bacterial opportunistic pathogen gene markers in municipal drinking water are associated with distribution system and household plumbing characteristics. *Environmental Science-Water Research & Technology* **2020**, *6*, 3032-3043, doi:10.1039/d0ew00723d.
248. Haig, S.J.; Kotlarz, N.; Lipuma, J.J.; Raskin, L. A high-throughput approach for identification of nontuberculous mycobacteria in drinking water reveals relationship between water age and *Mycobacterium avium*. *mBio* **2018**, *9*, e02354-02317, doi:10.1128/mBio.02354-17.
249. Glover, N.; Aronson, T.; Froman, S.; Berlin, O.G.W.; Dominguez, P.; Kunkel, K.A. The isolation and identification of *Mycobacterium avium* complex (MAC) recovered from Los Angeles potable water, a possible source of infection in aids patients. *International Journal of Environmental Health Research* **1994**, *4*, 63-72, doi:10.1080/09603129409356800.
250. Germinario, C.; Tafuri, S.; Napoli, C.; Martucci, V.; Termite, S.; Pedote, P.; Montagna, M.T.; Quarto, M. An outbreak of pneumonia in a thermal water spa contaminated with *Pseudomonas aeruginosa*: An epidemiological and environmental concern. *African Journal of Microbiology Research* **2012**, *6*, 1978-1984, doi:10.5897/ajmr11.1085.
251. Gebert, M.J.; Delgado-Baquerizo, M.; Oliverio, A.M.; Webster, T.M.; Nichols, L.M.; Honda, J.R.; Chan, E.D.; Adjemian, J.; Dunn, R.R.; Fierer, N. Ecological analyses of mycobacteria in showerhead biofilms and their relevance to human health. *mBio* **2018**, *9*, 1-15, doi:10.1128/mbio.01614-18.
252. Garner, E.; Brown, C.L.; Schwake, D.O.; Rhoads, W.J.; Arango-Argoty, G.; Zhang, L.Q.; Jospin, G.; Coil, D.A.; Eisen, J.A.; Edwards, M.A., et al. Comparison of whole genome sequences of *Legionella pneumophila* in tap water and in clinical strains, Flint, Michigan, USA, 2016. *Emerging Infectious Diseases* **2019**, *25*, 2013-2020, doi:10.3201/eid2511.181032.
253. Fischeder, R.; Schulze-Röbbecke, R.; Weber, A. Occurrence of mycobacteria in drinking water samples. *International journal of hygiene and environmental medicine* **1991**, *192*, 154-158.
254. Farooqui, A.; Khan, A.; Kazmi, S.U. Investigation of a community outbreak of typhoid fever associated with drinking water. *BMC Public Health* **2009**, *9*, doi:10.1186/1471-2458-9-476.
255. Falkinham Iii, J.O. Nontuberculous mycobacteria from household plumbing of patients with nontuberculous mycobacteria disease. *Emerging Infectious Diseases* **2011**, *17*, 419-424, doi:10.3201/eid1703.101510.
256. Euser, S.M.; Pelgrim, M.; Den Boer, J.W. Legionnaires' disease and Pontiac fever after using a private outdoor whirlpool spa. *Scandinavian Journal of Infectious Diseases* **2010**, *42*, 910-916, doi:10.3109/00365548.2010.509331.
257. Eguchi, H.; Miyamoto, T.; Kuwahara, T.; Mitamura, S.; Mitamura, Y. Infectious conjunctivitis caused by *Pseudomonas aeruginosa* isolated from a bathroom. *BMC Research Notes* **2013**, *6*, doi:10.1186/1756-0500-6-245.
258. Dufresne, S.F.; Locas, M.C.; Duchesne, A.; Restieri, C.; Ismail, J.; Lefebvre, B.; Labbe, A.C.; Dion, R.; Plante, M.; Laverdiere, M. Sporadic Legionnaires' disease: the role of domestic electric hot-water tanks. *Epidemiology and Infection* **2012**, *140*, 172-181, doi:10.1017/s0950268811000355.

259. Dovriki, E.; Gerogianni, I.; Petinaki, E.; Hadjichristodoulou, C.; Papaioannou, A.; Gourgoulisanis, K. Isolation and identification of nontuberculous mycobacteria from hospitalized patients and drinking water samples-examination of their correlation by chemometrics. *Environmental Monitoring and Assessment* **2016**, *188*, doi:10.1007/s10661-016-5258-7.
260. Donohue, M.J.; O'Connell, K.; Vesper, S.J.; Mistry, J.H.; King, D.; Kostich, M.; Pfaller, S. Widespread molecular detection of *Legionella pneumophila* serogroup 1 in cold water taps across the United States. *Environmental Science and Technology* **2014**, *48*, 3145-3152, doi:10.1021/es4055115.
261. Donati, M.; Cremonini, E.; Di Francesco, A.; Dallolio, L.; Biondi, R.; Muthusamy, R.; Leoni, E. Prevalence of *Simkania negevensis* in chlorinated water from spa swimming pools and domestic supplies. *Journal of Applied Microbiology* **2015**, *118*, 1076-1082, doi:10.1111/jam.12761.
262. Dhruve, M.J.; Bunce, P.E.; D'Gama, C.; Chan, C.T. Case of *Mycobacterium mucogenicum* in a home hemodialysis patient. *Hemodialysis International* **2017**, *21*, E79-E81, doi:10.1111/hdi.12574.
263. Dewailly, E.; Joly, J.R. Contamination of domestic water heaters with *Legionella pneumophila*: Impact of water temperature on growth and dissemination of the bacterium. *Environmental Toxicology and Water Quality* **1991**, *6*, 249-257, doi:10.1002/tox.2530060213.
264. Denton, M.; Todd, N.J.; Kerr, K.G.; Hawkey, P.M.; Littlewood, J.M. Molecular epidemiology of *Stenotrophomonas maltophilia* isolated from clinical specimens from patients with cystic fibrosis and associated environmental samples. *J Clin Microbiol* **1998**, *36*, 1953-1958, doi:10.1128/jcm.36.7.1953-1958.1998.
265. de Victorica, J.; Galvan, M. *Pseudomonas aeruginosa* as an indicator of health risk in water for human consumption. *Water Science and Technology* **2001**, *43*, 49-52.
266. de Sotto, R.; Tang, R.; Bae, S. Biofilms in premise plumbing systems as a double-edged sword: microbial community composition and functional profiling of biofilms in a tropical region. *Journal of Water and Health* **2020**, *18*, 172-185, doi:10.2166/wh.2020.182.
267. Cooper, I.R.; White, J.; Mahenthiralingam, E.; Hanlon, G.W. Long-term persistence of a single *Legionella pneumophila* strain possessing the mip gene in a municipal shower despite repeated cycles of chlorination. *Journal of Hospital Infection* **2008**, *70*, 154-159, doi:10.1016/j.jhin.2008.06.015.
268. Colbourne, J.S.; Trew, R.M. Presence of *Legionella* in London's water supplies. *Israel Journal of Medical Sciences* **1986**, *22*, 633-639.
269. Cohn, P.D.; Gleason, J.A.; Rudowski, E.; Tsai, S.M.; Genese, C.A.; Fagliano, J.A. Community outbreak of legionellosis and an environmental investigation into a community water system. *Epidemiology and Infection* **2015**, *143*, 1322-1331, doi:10.1017/s0950268814001964.
270. Codony, F.; Álvarez, J.; Oliva, J.M.; Ciurana, B.; Company, M.; Camps, N.; Torres, J.; Minguell, S.; Jové, N.; Cirera, E., et al. Factors promoting colonization by *Legionellae* in residential water distribution systems: An environmental case-control survey. *European Journal of Clinical Microbiology and Infectious Diseases* **2002**, *21*, 717-721, doi:10.1007/s10096-002-0789-y.
271. Chouhan, S.; Pancholi, A.; Vyas, R. Sanitary analysis of sitaraam Jaju Sagar Dam, Neemuch, Madhya Pradesh. *Asian Journal of Microbiology, Biotechnology and Environmental Sciences* **2014**, *16*, 167-173.
272. Chen, Y.S.; Lin, W.R.; Liu, Y.C.; Chang, C.L.; Gan, V.L.; Huang, W.K.; Huang, T.S.; Wann, S.R.; Lin, H.H.; Lee, S.S.J., et al. Residential water supply as a likely cause of community-acquired Legionnaires' disease in an immunocompromised host. *European Journal of Clinical Microbiology & Infectious Diseases* **2002**, *21*, 706-709, doi:10.1007/s10096-002-0815-0.
273. Charnock, C.; Hagen, R.X.; Nguyen, T.N.T.; Vo, L.T. Diversion and phylogenetic relatedness of filterable bacteria from Norwegian tap and bottled waters. *Journal of Water and Health* **2019**, *17*, 295-307, doi:10.2166/wh.2019.284.
274. Chandra, S.; Saxena, T.; Nehra, S.; Mohan, M.K. Quality assessment of supplied drinking water in Jaipur city, India, using PCR-based approach. *Environmental Earth Sciences* **2016**, *75*, doi:10.1007/s12665-015-4809-5.
275. Chaidez, C.; Soto, M.; Martinez, C.; Keswick, B. Drinking water microbiological survey of the Northwestern State of Sinaloa, Mexico. *Journal of Water and Health* **2008**, *6*, 125-129, doi:10.2166/wh.2007.011.
276. Chaidez, C.; Candil-Ruiz, A.; Gerba, C.P. Microbiological survey of private roof water tanks in Culiacan, Mexico. *Journal of Environmental Science and Health* **1999**, *34*, 1967-1978, doi:10.1080/10934529909376942.
277. Castillo, M.; Bernabe, L.A.; Castaneda, C.A.; Chavez, I.; Ruiz, E.; Barreda, F.; Valdivia, D.; Suarez, N.; Nieves, J.; Dias-Neto, E., et al. *Helicobacter pylori* detected in tap water of peruvian patients with gastric cancer. *Asian Pacific Journal of Cancer Prevention* **2019**, *20*, 3193-3196, doi:10.31557/APJCP.2019.20.11.3193.
278. Burke, V.; Robinson, J.; Gracey, M.; Peterson, D.; Meyer, N.; Haley, V. Isolation of *Aeromonas* spp. from an unchlorinated domestic water supply. *Applied and Environmental Microbiology* **1984**, *48*, 367-370, doi:10.1128/aem.48.2.367-370.1984.

279. Burak, D.M.; Zeybek, Z. Investigation of *Legionella pneumophila* and free living amoebas in the domestic hot water systems in Istanbul. *Turkish Journal of Biology* **2011**, *35*, 679–685, doi:10.3906/biy-0907-93.
280. Buchholz, U.; Jahn, H.J.; Brodhun, B.; Lehfeld, A.S.; Lewandowsky, M.M.; Reber, F.; Adler, K.; Bochmann, J.; Förster, C.; Koch, M., et al. Source attribution of community-acquired cases of Legionnaires' disease—results from the German LeTriWa study; Berlin, 2016–2019. *PLoS ONE* **2020**, *15*, doi:10.1371/journal.pone.0241724.
281. Briancesco, R.; Semproni, M.; Libera, S.D.; Sdanganelli, M.; Bonadonna, L. Non-tuberculous mycobacteria and microbial populations in drinking water distribution systems. *Annali dell'Istituto Superiore di Sanita* **2010**, *46*, 254–258, doi:10.4415/ANN-10-03-05.
282. Borella, P.; Montagna, M.T.; Romano-Spica, V.; Stampi, S.; Stancanelli, G.; Triassi, M.; Neglia, R.; Marchesi, I.; Fantuzzi, G.; Tato, D., et al. *Legionella* infection risk from domestic hot water. *Emerging Infectious Diseases* **2004**, *10*, 457–464, doi:10.3201/eid1003.020707.
283. Baqai, R.; Zuberi, S.J. Bacteriological and protozoal study on domestic water supply in Karachi. *The Journal of the Pakistan Medical Association* **1991**, *41*, 33–35.
284. Bae, S.; Lyons, C.; Onstad, N. A culture-dependent and metagenomic approach of household drinking water from the source to point of use in a developing country. *Water Research X* **2019**, *2*, 1–11, doi:10.1016/j.wroa.2019.100026.
285. Augoustinos, M.T.; Venter, S.N.; Kfir, R. Assessment of water quality problems due to microbial growth in drinking water distribution systems. *Environmental Toxicology and Water Quality* **1995**, *10*, 295–299, doi:10.1002/tox.2530100410.
286. Aronson, T.; Holtzman, A.; Glover, N.; Boian, M.; Froman, S.; Berlin, O.G.W.; Hill, H.; Stelma, G. Comparison of large restriction fragments of *Mycobacterium avium* isolates recovered from AIDS and non-AIDS patients with those of isolates from potable water. *J Clin Microbiol* **1999**, *37*, 1008–1012, doi:10.1128/jcm.37.4.1008-1012.1999.
287. Arnow, P.M.; Weil, D.; Para, M.F. Prevalence and significance of *Legionella pneumophila* contamination of residential hot-tap water systems. *Journal of Infectious Diseases* **1985**, *152*, 145–151, doi:10.1093/infdis/152.1.145.
288. Arikawa, K.; Ichijo, T.; Nakajima, S.; Nishiuchi, Y.; Yano, H.; Tamaru, A.; Yoshida, S.; Maruyama, F.; Ota, A.; Nasu, M., et al. Genetic relatedness of *Mycobacterium avium* subsp. *hominissuis* isolates from bathrooms of healthy volunteers, rivers, and soils in Japan with human clinical isolates from different geographical areas. *Infection Genetics and Evolution* **2019**, *74*, doi:10.1016/j.meegid.2019.103923.
289. Ali, M.; Chandu, V.; Nandini, V.; Mostafa, M.; Alkendi, R. Evaluation of water quality in the households of Baniyas Region, Abu Dhabi using multivariate statistical approach. *Sustainable Water Resources Management* **2019**, *5*, 1579–1592, doi:10.1007/s40899-019-00320-7.
290. Alary, M.; Joly, J.R. Comparison of culture methods and an immunofluorescence assay for the detection of *Legionella pneumophila* in domestic hot water devices. *Current Microbiology* **1992**, *25*, 19–23, doi:10.1007/BF01570077.
291. Alary, M.; Joly, J.R. Risk factors for contamination of domestic hot water systems by *Legionellae*. *Applied and Environmental Microbiology* **1991**, *57*, 2360–2367, doi:10.1128/aem.57.8.2360-2367.1991.