

Table S1 Temporal trend on prevalence of MASLD stratified by gender and race-ethnicity

Type of mortality	1999-2000	2001-2002	2003-2004	2005-2006	2007-2008	2009-2010	2011-2012	2013-2014	2015-2016	2017-2018	AAPC, %	P
Total MASLD, %	71.83 (69.73 to 78.84)	71.69 (69.65 to 73.66)	71.64 (69.56 to 73.63)	69.18 (67.13 to 71.15)	71.16 (69.33 to 72.93)	66.15 (63.38 to 68.81)	66.50 (64.43 to 68.52)	67.86 (65.94 to 69.72)	66.78 (64.90 to 68.63)	67.10 (65.19 to 68.96)	-4.802	0.001*
Gender, %												
Male	69.49 (66.48 to 72.35)	68.06 (65.18 to 70.82)	69.34 (66.46 to 72.08)	67.59 (64.74 to 70.31)	68.64 (66.10 to 71.10)	63.84 (60.00 to 67.52)	63.10 (60.22 to 65.89)	67.11 (64.41 to 69.69)	64.21 (61.52 to 66.81)	68.35 (65.74 to 70.86)	-1.600	0.15
Female	74.28 (71.33 to 77.03)	75.99 (73.06 to 78.68)	74.42 (71.39 to 77.23)	71.01 (68.03 to 73.81)	74.24 (71.56 to 76.75)	68.83 (64.79 to 72.60)	70.53 (67.54 to 73.36)	68.67 (65.91 to 71.31)	69.54 (66.85 to 72.09)	65.68 (62.84 to 68.41)	-5.294	<0.001*
Ethnicity, %												
Mexican Americans	67.74 (63.86 to 71.40)	65.10 (60.66 to 69.29)	64.30 (59.84 to 68.53)	61.66 (57.12 to 66.00)	60.08 (55.70 to 64.30)	61.37 (55.50 to 66.93)	54.78 (48.82 to 60.60)	59.81 (55.00 to 64.43)	61.18 (57.07 to 65.14)	56.47 (51.57 to 61.24)	-4.400	0.002*
Other Hispanic	68.57 (59.10 to 76.71)	77.22 (66.70 to 85.15)	67.31 (53.56 to 78.61)	69.35 (56.88 to 79.52)	67.65 (61.86 to 72.94)	69.92 (61.61 to 77.11)	61.78 (55.26 to 67.90)	70.61 (64.38 to 76.16)	66.58 (61.60 to 71.21)	61.70 (55.33 to 67.70)	-1.897	0.09
Non-Hispanic White	73.48 (70.22 to 76.50)	72.96 (70.10 to 75.63)	74.92 (72.06 to 77.58)	68.85 (65.85 to 71.69)	75.92 (73.35 to 79.31)	66.03 (61.85 to 69.97)	67.42 (64.09 to 70.57)	68.28 (65.38 to 71.05)	66.75 (63.42 to 69.92)	69.99 (66.84 to 72.95)	-2.198	0.06
Non-Hispanic Black	75.37 (70.51 to 79.65)	74.79 (70.00 to 79.04)	72.87 (68.15 to 77.13)	77.45 (73.45 to 81.00)	72.01 (67.64 to 75.99)	69.39 (62.59 to 75.44)	69.57 (65.68 to 73.19)	69.09 (64.69 to 73.18)	68.87 (64.60 to 72.83)	68.57 (64.54 to 72.33)	-0.642	0.002*
Other	77.36 (64.23 to 86.67)	78.26 (64.11 to 87.88)	73.08 (59.53 to 83.36)	67.53 (56.35 to 77.02)	80.28 (69.41 to 87.96)	72.97 (56.65 to 84.80)	76.40 (69.61 to 82.07)	75.69 (69.55 to 80.92)	76.52 (70.61 to 81.56)	73.87 (68.89 to 78.31)	-0.103	0.65

Data are presented as (95% CI). *, P value ≤ 0.05 denotes statistical significance. MASLD, metabolic dysfunction associated steatotic liver disease and increased alcohol intake; AAPC, average annual percentage change.

Table S2 Temporal trend on prevalence of MetALD stratified by gender and race-ethnicity

Type of mortality	1999-2000	2001-2002	2003-2004	2005-2006	2007-2008	2009-2010	2011-2012	2013-2014	2015-2016	2017-2018	AAPC, %	P
Total MetALD, %	15.93 (14.33 to 17.67)	16.89 (15.29 to 18.63)	16.77 (15.15 to 18.53)	18.51 (16.88 to 20.26)	17.16 (15.71 to 18.72)	18.99 (16.83 to 21.34)	19.50 (17.84 to 21.27)	21.06 (19.45 to 22.75)	20.20 (18.66 to 21.84)	21.50 (19.89 to 23.20)	1.635	<0.001*
Gender, %												
Male	14.83 (12.70 to 17.24)	15.06 (13.02 to 17.36)	14.99 (12.94 to 17.30)	15.47 (13.44 to 17.74)	15.90 (14.04 to 17.97)	16.00 (13.33 to 19.09)	18.27 (16.11 to 20.65)	18.42 (16.34 to 20.70)	17.38 (15.39 to 19.57)	18.28 (16.24 to 20.50)	1.357	<0.001*
Female	17.07 (14.76 to 19.67)	19.05 (16.60 to 21.77)	18.93 (16.44 to 21.69)	22.01 (19.48 to 24.77)	18.70 (16.49 to 21.12)	22.45 (19.12 to 26.17)	20.96 (18.47 to 23.68)	23.89 (21.50 to 26.47)	23.21 (20.89 to 25.70)	25.16 (22.69 to 27.79)	1.840	<0.001*
Ethnicity, %												
Mexican Americans	13.58 (11.04 to 16.59)	16.06 (13.00 to 19.67)	16.13 (13.06 to 19.76)	18.08 (14.82 to 21.87)	20.97 (17.61 to 24.77)	15.16 (11.40 to 19.88)	19.49 (15.20 to 24.62)	22.52 (18.75 to 26.80)	21.29 (18.09 to 24.88)	22.14 (18.35 to 26.46)	2.413	0.002*
Other Hispanic	16.19 (10.31 to 24.51)	15.19 (8.83 to 24.87)	9.62 (4.06 to 21.10)	20.97 (12.58 to 32.84)	15.44 (11.62 to 20.24)	10.53 (6.33 to 16.99)	22.22 (17.26 to 28.12)	17.98 (13.52 to 23.51)	20.65 (16.82 to 25.09)	25.11 (19.98 to 31.04)	0.976	0.39
Non-Hispanic White	16.62 (14.14 to 19.44)	17.56 (15.31 to 20.05)	17.04 (14.77 to 19.57)	20.25 (17.83 to 22.91)	14.97 (13.02 to 17.16)	22.65 (19.26 to 26.44)	19.73 (17.11 to 22.63)	21.28 (18.89 to 23.88)	20.67 (18.01 to 23.61)	19.24 (16.74 to 22.00)	1.169	0.10
Non-Hispanic Black	19.06 (15.24 to 23.58)	16.71 (13.17 to 20.98)	18.09 (14.51 to 22.31)	14.68 (11.76 to 18.18)	20.09 (16.62 to 24.08)	20.92 (15.79 to 27.18)	19.83 (16.77 to 23.29)	23.18 (19.52 to 27.29)	21.03 (17.63 to 24.89)	24.45 (21.02 to 28.24)	1.106	0.006*
Other	11.32 (5.18 to 22.99)	15.22 (7.43 to 28.64)	15.38 (7.88 to 27.86)	20.78 (13.14 to 31.27)	14.08 (7.75 to 24.24)	16.22 (7.47 to 31.69)	14.04 (9.67 to 19.96)	16.06 (11.76 to 21.54)	13.48 (9.64 to 18.53)	19.22 (15.34 to 23.81)	2.886	0.04*

Data are presented as (95% CI). *, P value ≤ 0.05 denotes statistical significance. MetALD, metabolic dysfunction associated steatotic liver disease and increased alcohol intake; AAPC, average annual percentage change.

Table S3 Temporal trend on prevalence of ALD stratified by gender and race-ethnicity

Type of mortality	1999-2000	2001-2002	2003-2004	2005-2006	2007-2008	2009-2010	2011-2012	2013-2014	2015-2016	2017-2018	AAPC, %	P
Total ALD, %	12.24 (10.82 to 13.82)	11.42 (10.07 to 12.91)	11.59 (10.22 to 13.11)	12.31 (10.95 to 13.81)	11.67 (10.46 to 13.02)	14.86 (12.93 to 17.02)	13.99 (12.55 to 15.56)	11.08 (9.87 to 12.42)	13.01 (11.73 to 14.40)	11.40 (10.18 to 12.74)	0.193	0.73
Gender, %												
Male	15.68 (13.50 to 18.14)	16.87 (14.73 to 19.26)	15.67 (13.58 to 18.01)	16.94 (14.83 to 19.29)	15.45 (13.61 to 17.50)	20.16 (17.20 to 23.49)	18.63 (16.45 to 21.03)	14.47 (12.61 to 16.57)	18.41 (16.37 to 20.65)	13.37 (11.60 to 15.36)	-0.096	0.90
Female	8.65 (6.98 to 10.67)	4.96 (3.71 to 6.60)	6.66 (5.17 to 8.54)	6.98 (5.52 to 8.79)	7.06 (5.68 to 8.74)	8.72 (6.61 to 11.41)	8.51 (6.88 to 10.47)	7.43 (6.04 to 9.12)	7.26 (5.91 to 8.88)	9.16 (7.60 to 11.01)	1.043	0.25
Ethnicity, %												
Mexican American	18.68 (15.73 to 22.03)	18.84 (15.55 to 22.65)	19.57 (16.21 to 23.43)	20.26 (16.83 to 24.19)	18.95 (15.74 to 22.64)	23.47 (18.85 to 28.82)	25.74 (20.89 to 31.26)	17.68 (14.29 to 21.66)	17.53 (14.60 to 20.91)	21.39 (17.66 to 25.67)	0.339	0.62
Other Hispanic	15.24 (9.55 to 23.44)	7.59 (3.45 to 15.89)	23.08 (13.60 to 36.38)	9.68 (4.41 to 19.91)	16.91 (12.91 to 21.84)	19.55 (13.67 to 27.17)	16.00 (11.77 to 21.39)	11.40 (7.88 to 16.22)	12.77 (9.73 to 16.59)	13.19 (9.43 to 18.15)	-1.664	0.27
Non-Hispanic White	9.89 (7.96 to 12.23)	9.49 (7.81 to 11.47)	8.04 (6.47 to 9.96)	10.90 (9.09 to 13.03)	9.11 (7.57 to 10.92)	11.32 (8.87 to 14.34)	12.86 (10.71 to 15.36)	10.44 (8.72 to 12.46)	12.58 (10.46 to 15.06)	10.78 (8.88 to 13.03)	1.442	0.07
Non-Hispanic Black	5.57 (3.58 to 8.57)	8.50 (6.01 to 11.90)	9.04 (6.53 to 12.39)	7.87 (5.76 to 10.68)	7.90 (5.73 to 10.81)	9.69 (6.27 to 14.70)	10.61 (8.34 to 13.40)	7.73 (5.60 to 10.57)	10.10 (7.72 to 13.12)	6.99 (5.12 to 9.46)	0.822	0.46
Other	11.32 (5.18 to 22.99)	6.52 (2.12 to 18.36)	11.54 (5.28 to 23.40)	11.69 (6.19 to 20.97)	5.63 (2.13 to 14.07)	10.81 (4.12 to 25.49)	9.55 (6.02 to 14.83)	8.26 (5.26 to 12.72)	10.00 (6.74 to 14.60)	6.91 (4.63 to 10.18)	-1.882	0.14

Data are presented as (95% CI). ALD, alcohol-associated liver disease; AAPC, average annual percentage change.