```
                                                     ___  ___  ___  ___  ___(R)
                                                    /__  /  ___/  /  ___/
                                                   ___/  /  /__/  /  /__/
                                                    Statistics/Data analysis
```

```
 1 .
 2 . use "E:\16GBBACKUPUSB\BACKUP_USB_SEPTEMBER2014\May Baydoun_folder\UK_BIOBANK_PROJECT\UKB_PAPER3_LE8INFECTDEM\DATA\

 3 .
 4 . **Main exposures of interest: LE8* infectionburden viralinfectionburden bacterialinfectionburden
 5 . **Main outcomes of interest: Dementia and AD
 6 . **Main covariates: AGE SEX RACE_ETHN (or Non_White) educationbr townsend householdincome householdsize
 7 . **Main effect modifiers: sex and race
 8 .
 9 .
10 .
11 .
12 .
13 . ****************AGE and SEX********************************
14 .
15 . capture drop AGE

16 . gen AGE=Age
   (3 missing values generated)

17 .
18 . capture drop SEX

19 . gen SEX=.
   (502,389 missing values generated)

20 . replace SEX=1 if sex==1
   (229,077 real changes made)

21 . replace SEX=2 if sex==2
   (273,312 real changes made)

22 .
23 . save,replace
   file E:\16GBBACKUPUSB\BACKUP_USB_SEPTEMBER2014\May Baydoun_folder\UK_BIOBANK_PROJECT\UKB_PAPER3_LE8INFECTDEM\DATA\UK

24 .
25 . **********TABLE 1: OVERALL, BY SEX AND BY RACE ***************
26 .
27 . capture drop infectionburdenbr

28 . gen infectionburdenbr=1 if infectionburden>=1
   (328,882 missing values generated)

29 . replace infectionburdenbr=0 if infectionburden==0
   (328,882 real changes made)

30 .
31 .
32 . capture drop infectionburdenhospbr

33 . gen infectionburdenhospbr=1 if infectionburdenhosp>=1
   (441,555 missing values generated)
```

34 . replace infectionburdenhospbr=0 if infectionburdenhosp==0
   (441,555 real changes made)

35 .
36 .
37 . capture drop infectionburdennonhospbr

38 . gen infectionburdennonhospbr=1 if infectionburdennonhosp>=1
   (389,716 missing values generated)

39 . replace infectionburdennonhospbr=0 if infectionburdennonhosp==0
   (389,716 real changes made)

40 .
41 .
42 . capture drop infectionburden_THREE

43 . gen infectionburden_THREE=.
   (502,389 missing values generated)

44 . replace infectionburden_THREE=0 if infectionburdenbr==0
   (328,882 real changes made)

45 . replace infectionburden_THREE=1 if infectionburdenbr==1 & infectionburdenhospbr==0
   (112,673 real changes made)

46 . replace infectionburden_THREE=2 if infectionburdenbr==1 & infectionburdenhospbr==1
   (60,834 real changes made)

47 .
48 .
49 . ****OVERALL**
50 .
51 . foreach x1 of varlist AGE householdsize townsend LE8* SES infectionburden infectionburdenhosp infectionburden_THR
   2.   mean `x1' if sample_final==1
   3. }

Mean estimation   Number of obs = **355,046**

	Mean	Std. err.	[95% conf. interval]	
AGE	**59.91319**	**.009134**	**59.89529**	**59.9311**

Mean estimation   Number of obs = **355,046**

	Mean	Std. err.	[95% conf. interval]	
householdsize	**2.23048**	**.0019687**	**2.226621**	**2.234339**

Mean estimation   Number of obs = **354,740**

	Mean	Std. err.	[95% conf. interval]	
townsend	**-1.516773**	**.0049895**	**-1.526552**	**-1.506993**

Mean estimation   Number of obs = **354,960**

	Mean	Std. err.	[95% conf. interval]	
LE8_COMP1DIET	34.04077	.0520843	33.93868	34.14285

Mean estimation   Number of obs = 355,046

	Mean	Std. err.	[95% conf. interval]	
LE8_COMP2PA	47.85825	.058926	47.74276	47.97374

Mean estimation   Number of obs = 355,046

	Mean	Std. err.	[95% conf. interval]	
LE8_COMP3NICOTINE	84.68202	.0492023	84.58559	84.77846

Mean estimation   Number of obs = 353,366

	Mean	Std. err.	[95% conf. interval]	
LE8_COMP4SLEEP	89.03582	.0316756	88.97373	89.0979

Mean estimation   Number of obs = 353,766

	Mean	Std. err.	[95% conf. interval]	
LE8_COMP5BMI	68.34819	.0478622	68.25438	68.442

Mean estimation   Number of obs = 307,261

	Mean	Std. err.	[95% conf. interval]	
LE8_COMP6LIPIDS	48.10913	.054448	48.00242	48.21585

Mean estimation   Number of obs = 333,452

	Mean	Std. err.	[95% conf. interval]	
LE8_COMP7GLUC	89.51498	.0363582	89.44372	89.58624

Mean estimation   Number of obs = 333,181

	Mean	Std. err.	[95% conf. interval]	
LE8_COMP8BP	38.08889	.0532814	37.98446	38.19332

Mean estimation   Number of obs = 355,046

	Mean	Std. err.	[95% conf. interval]	
LE8_TOTALSCORE	501.482	.1612523	501.166	501.7981

Mean estimation   Number of obs = 355,046

	Mean	Std. err.	[95% conf. interval]	
LE8_LIFESTYLE	255.424	.106511	255.2152	255.6327

Mean estimation   Number of obs = 355,046

	Mean	Std. err.	[95% conf. interval]	
LE8_BIOLOGICAL	245.822	.1116625	245.6032	246.0409

Mean estimation   Number of obs = 355,046

	Mean	Std. err.	[95% conf. interval]	
LE8_TOTALSCOREtert	1.956048	.0013611	1.95338	1.958716

Mean estimation   Number of obs = 355,046

	Mean	Std. err.	[95% conf. interval]	
SES	-.0455256	.0011617	-.0478024	-.0432487

Mean estimation   Number of obs = 355,046

	Mean	Std. err.	[95% conf. interval]	
infectionburden	.7462019	.0023103	.7416739	.75073

Mean estimation   Number of obs = 355,046

	Mean	Std. err.	[95% conf. interval]	
infectionburdenhosp	.2597016	.0014795	.2568018	.2626013

Mean estimation   Number of obs = 355,046

	Mean	Std. err.	[95% conf. interval]	
infectionburden_THREE	.4770565	.0011906	.4747229	.4793901

```
52 .
53 .
54 .
55 . foreach x2 of varlist dem_diag ad_diag SEX RACE_ETHN NonWhite educationbr householdincome infectionburdenbr infect
  2.          prop `x2' if sample_final==1
  3. }
```

Proportion estimation   Number of obs = **355,046**

	Proportion	Std. err.	Logit [95% conf. interval]	
dem_diag				
0	.9821572	.0002222	.9817165	.9825875
1	.0178428	.0002222	.0174125	.0182835

Proportion estimation   Number of obs = **355,046**

	Proportion	Std. err.	Logit [95% conf. interval]	
ad_diag				
0	.9924939	.0001449	.9922046	.9927726
1	.0075061	.0001449	.0072274	.0077954

Proportion estimation   Number of obs = **355,046**

	Proportion	Std. err.	Logit [95% conf. interval]	
SEX				
1	.4645088	.000837	.4628687	.4661497
2	.5354912	.000837	.5338503	.5371313

Proportion estimation   Number of obs = **355,046**

	Proportion	Std. err.	Logit [95% conf. interval]	
RACE_ETHN				
0	.9582251	.0003358	.957562	.9588783
1	.0106831	.0001725	.0103502	.0110266
2	.0147727	.0002025	.0143811	.0151749
3	.016319	.0002126	.0159074	.016741

Proportion estimation   Number of obs = **355,046**

	Proportion	Std. err.	Logit [95% conf. interval]	
NonWhite				
white	.9582251	.0003358	.957562	.9588783
Non-White	.0417749	.0003358	.0411217	.042438

Proportion estimation   Number of obs = **295,455**

	Proportion	Std. err.	Logit [95% conf. interval]	
educationbr				
0	.2176135	.0007591	.2161293	.219105
1	.3946862	.0008992	.3929251	.39645
2	.3877003	.0008964	.3859449	.3894586

Proportion estimation   Number of obs = **318,904**

	Proportion	Std. err.	Logit [95% conf. interval]	
householdincome				
1	.2589651	.0007757	.2574476	.2604884
2	.2780116	.0007934	.2764593	.2795692
3	.2461336	.0007628	.2446417	.2476317
4	.1726977	.0006693	.1713898	.1740136
5	.044192	.0003639	.0434841	.0449108

Proportion estimation   Number of obs = **355,046**

	Proportion	Std. err.	Logit [95% conf. interval]	
infectionburdenbr				
0	.6498623	.0008005	.6482916	.6514297
1	.3501377	.0008005	.3485703	.3517084

Proportion estimation   Number of obs = **355,046**

	Proportion	Std. err.	Logit [95% conf. interval]	
infectionburdenhospbr				
0	.8730812	.0005587	.8719822	.8741722
1	.1269188	.0005587	.1258278	.1280178

Proportion estimation   Number of obs = **355,046**

	Proportion	Std. err.	Logit [95% conf. interval]	
infectionburden_THREE				
0	.6498623	.0008005	.6482916	.6514297
1	.223219	.0006988	.2218523	.2245916
2	.1269188	.0005587	.1258278	.1280178

```
56 .
57 .
58 . **Among Men**
59 .
60 . foreach x1 of varlist AGE householdsize townsend LE8* SES infectionburden infectionburdenhosp infectionburden_THRE
 2.          mean `x1' if sample_final==1 & SEX==1
 3. }
```

Mean estimation   Number of obs = **164,922**

	Mean	Std. err.	[95% conf. interval]
AGE	**60.22552**	**.0134463**	**60.19916**	**60.25187**

Mean estimation   Number of obs = **164,922**

	Mean	Std. err.	[95% conf. interval]
householdsize	**2.306448**	**.0029429**	**2.30068**	**2.312216**

Mean estimation   Number of obs = **164,770**

	Mean	Std. err.	[95% conf. interval]
townsend	**-1.49749**	**.0074447**	**-1.512081**	**-1.482898**

Mean estimation   Number of obs = **164,870**

	Mean	Std. err.	[95% conf. interval]
LE8_COMP1DIET	**28.52714**	**.0748364**	**28.38046**	**28.67382**

Mean estimation   Number of obs = **164,922**

	Mean	Std. err.	[95% conf. interval]
LE8_COMP2PA	**49.20575**	**.0866112**	**49.03599**	**49.3755**

Mean estimation   Number of obs = **164,922**

	Mean	Std. err.	[95% conf. interval]
LE8_COMP3NICOTINE	**82.1738**	**.0768667**	**82.02314**	**82.32446**

Mean estimation   Number of obs = **164,369**

	Mean	Std. err.	[95% conf. interval]
LE8_COMP4SLEEP	**89.36174**	**.0455654**	**89.27243**	**89.45105**

Mean estimation   Number of obs = **164,243**

	Mean	Std. err.	[95% conf. interval]	
LE8_COMP5BMI	**66.01816**	**.0662689**	**65.88827**	**66.14804**

Mean estimation   Number of obs = **144,425**

	Mean	Std. err.	[95% conf. interval]	
LE8_COMP6LIPIDS	**53.20145**	**.082869**	**53.03903**	**53.36388**

Mean estimation   Number of obs = **155,580**

	Mean	Std. err.	[95% conf. interval]	
LE8_COMP7GLUC	**88.1621**	**.0572854**	**88.04982**	**88.27438**

Mean estimation   Number of obs = **154,875**

	Mean	Std. err.	[95% conf. interval]	
LE8_COMP8BP	**34.78822**	**.0719834**	**34.64713**	**34.9293**

Mean estimation   Number of obs = **164,922**

	Mean	Std. err.	[95% conf. interval]	
LE8_TOTALSCORE	**492.4891**	**.2302576**	**492.0378**	**492.9404**

Mean estimation   Number of obs = **164,922**

	Mean	Std. err.	[95% conf. interval]	
LE8_LIFESTYLE	**249.1207**	**.1577715**	**248.8115**	**249.4299**

Mean estimation   Number of obs = **164,922**

	Mean	Std. err.	[95% conf. interval]	
LE8_BIOLOGICAL	**243.2623**	**.1539114**	**242.9606**	**243.5639**

Mean estimation   Number of obs = **164,922**

	Mean	Std. err.	[95% conf. interval]	
LE8_TOTALSCOREtert	**1.883878**	**.0019613**	**1.880034**	**1.887722**

Mean estimation   Number of obs = **164,922**

	Mean	Std. err.	[95% conf. interval]	
SES	-.0250735	.0017604	-.0285238	-.0216231

Mean estimation   Number of obs = **164,922**

	Mean	Std. err.	[95% conf. interval]	
infectionburden	.6699591	.0030639	.6639539	.6759644

Mean estimation   Number of obs = **164,922**

	Mean	Std. err.	[95% conf. interval]	
infectionburdenhosp	.2512582	.0020527	.247235	.2552814

Mean estimation   Number of obs = **164,922**

	Mean	Std. err.	[95% conf. interval]	
infectionburden_THREE	.4628673	.0017471	.4594431	.4662915

```
61 .
62 .
63 .
64 . foreach x2 of varlist dem_diag ad_diag SEX RACE_ETHN NonWhite educationbr householdincome infectionburdenbr infect
  2.         prop `x2' if sample_final==1 & SEX==1
  3. }
```

Proportion estimation   Number of obs = **164,922**

	Proportion	Std. err.	Logit [95% conf. interval]	
dem_diag				
0	.9791598	.0003518	.9784591	.9798382
1	.0208402	.0003518	.0201618	.0215409

Proportion estimation   Number of obs = **164,922**

	Proportion	Std. err.	Logit [95% conf. interval]	
ad_diag				
0	.9920023	.0002193	.9915607	.9924209
1	.0079977	.0002193	.0075791	.0084393

Proportion estimation   Number of obs = **164,922**

	Proportion	Std. err.	Logit [95% conf. interval]	
1.SEX	1	0	.	.

Proportion estimation   Number of obs = **164,922**

	Proportion	Std. err.	Logit [95% conf. interval]	
RACE_ETHN				
0	.9582591	.0004925	.9572831	.9592137
1	.009459	.0002384	.0090031	.0099378
2	.0173476	.0003215	.0167286	.0179891
3	.0149343	.0002987	.0143601	.0155312

Proportion estimation   Number of obs = **164,922**

	Proportion	Std. err.	Logit [95% conf. interval]	
NonWhite				
white	.9582591	.0004925	.9572831	.9592137
Non-White	.0417409	.0004925	.0407863	.0427169

Proportion estimation   Number of obs = **135,396**

	Proportion	Std. err.	Logit [95% conf. interval]	
educationbr				
0	.2399923	.0011607	.2377248	.2422746
1	.3471151	.0012938	.3445837	.3496552
2	.4128926	.0013381	.4102725	.4155176

Proportion estimation   Number of obs = **153,496**

	Proportion	Std. err.	Logit [95% conf. interval]	
householdincome				
1	.2330289	.0010791	.2309206	.2351505
2	.2668213	.0011289	.2646145	.2690398
3	.2553943	.0011131	.2532188	.257582
4	.1930148	.0010073	.1910481	.1949969
5	.0517408	.0005654	.0506438	.0528602

Proportion estimation   Number of obs = **164,922**

	Proportion	Std. err.	Logit [95% conf. interval]	
infectionburdenbr				
0	.6645081	.0011627	.6622255	.666783
1	.3354919	.0011627	.333217	.3377745

Proportion estimation   Number of obs = **164,922**

	Proportion	Std. err.	Logit [95% conf. interval]	
infectionburdenhospbr				
0	.8726246	.000821	.8710069	.874225
1	.1273754	.000821	.125775	.1289931

Proportion estimation   Number of obs = **164,922**

	Proportion	Std. err.	Logit [95% conf. interval]	
infectionburden_THREE				
0	.6645081	.0011627	.6622255	.666783
1	.2081166	.0009996	.2061641	.2100826
2	.1273754	.000821	.125775	.1289931

```
65 .
66 . **Among Women**
67 .
68 . foreach x1 of varlist AGE householdsize townsend LE8* SES infectionburden infectionburdenhosp infectionburden_THRE
  2.          mean `x1' if sample_final==1 & SEX==2
  3. }
```

Mean estimation   Number of obs = **190,124**

	Mean	Std. err.	[95% conf. interval]	
AGE	**59.64227**	**.0124125**	**59.61794**	**59.6666**

Mean estimation   Number of obs = **190,124**

	Mean	Std. err.	[95% conf. interval]	
householdsize	**2.164582**	**.0026363**	**2.159415**	**2.169749**

Mean estimation   Number of obs = **189,970**

	Mean	Std. err.	[95% conf. interval]	
townsend	**-1.533497**	**.0067165**	**-1.546662**	**-1.520333**

Mean estimation   Number of obs = **190,090**

	Mean	Std. err.	[95% conf. interval]	
LE8_COMP1DIET	38.82287	.0706202	38.68446	38.96129

Mean estimation   Number of obs = **190,124**

	Mean	Std. err.	[95% conf. interval]	
LE8_COMP2PA	46.68937	.0803057	46.53197	46.84677

Mean estimation   Number of obs = **190,124**

	Mean	Std. err.	[95% conf. interval]	
LE8_COMP3NICOTINE	86.85776	.0627926	86.73469	86.98083

Mean estimation   Number of obs = **188,997**

	Mean	Std. err.	[95% conf. interval]	
LE8_COMP4SLEEP	88.75236	.044002	88.66612	88.8386

Mean estimation   Number of obs = **189,523**

	Mean	Std. err.	[95% conf. interval]	
LE8_COMP5BMI	70.36742	.068097	70.23395	70.50089

Mean estimation   Number of obs = **162,836**

	Mean	Std. err.	[95% conf. interval]	
LE8_COMP6LIPIDS	43.59257	.0699058	43.45556	43.72959

Mean estimation   Number of obs = **177,872**

	Mean	Std. err.	[95% conf. interval]	
LE8_COMP7GLUC	90.69831	.0460247	90.6081	90.78852

Mean estimation   Number of obs = **178,306**

	Mean	Std. err.	[95% conf. interval]	
LE8_COMP8BP	40.95583	.0768376	40.80523	41.10643

Mean estimation   Number of obs = **190,124**

	Mean	Std. err.	[95% conf. interval]	
LE8_TOTALSCORE	509.2829	.2238212	508.8442	509.7215

Mean estimation   Number of obs = 190,124

	Mean	Std. err.	[95% conf. interval]	
LE8_LIFESTYLE	260.8917	.1431575	260.6111	261.1723

Mean estimation   Number of obs = 190,124

	Mean	Std. err.	[95% conf. interval]	
LE8_BIOLOGICAL	248.0425	.1600047	247.7288	248.3561

Mean estimation   Number of obs = 190,124

	Mean	Std. err.	[95% conf. interval]	
LE8_TOTALSCOREtert	2.018651	.0018767	2.014973	2.022329

Mean estimation   Number of obs = 190,124

	Mean	Std. err.	[95% conf. interval]	
SES	-.0632667	.0015397	-.0662845	-.0602489

Mean estimation   Number of obs = 190,124

	Mean	Std. err.	[95% conf. interval]	
infectionburden	.8123383	.0033911	.8056917	.8189848

Mean estimation   Number of obs = 190,124

	Mean	Std. err.	[95% conf. interval]	
infectionburdenhosp	.2670257	.0021125	.2628854	.2711661

Mean estimation   Number of obs = 190,124

	Mean	Std. err.	[95% conf. interval]	
infectionburden_THREE	.4893648	.0016264	.4861771	.4925526

```
69 .
70 .
71 .
72 . foreach x2 of varlist dem_diag ad_diag SEX RACE_ETHN NonWhite educationbr householdincome infectionburdenbr infect
   2.          prop `x2' if sample_final==1 & SEX==2
   3.
73 . }
```

Proportion estimation   Number of obs = **190,124**

	Proportion	Std. err.	Logit [95% conf. interval]	
dem_diag				
0	.9847573	.000281	.9841967	.9852983
1	.0152427	.000281	.0147017	.0158033

Proportion estimation   Number of obs = **190,124**

	Proportion	Std. err.	Logit [95% conf. interval]	
ad_diag				
0	.9929204	.0001923	.9925334	.9932875
1	.0070796	.0001923	.0067125	.0074666

Proportion estimation   Number of obs = **190,124**

	Proportion	Std. err.	Logit [95% conf. interval]	
2.SEX	1	0	.	.

Proportion estimation   Number of obs = **190,124**

	Proportion	Std. err.	Logit [95% conf. interval]	
RACE_ETHN				
0	.9581957	.000459	.9572867	.9590861
1	.011745	.0002471	.0112704	.0122392
2	.0125392	.0002552	.0120487	.0130493
3	.0175201	.0003009	.01694	.0181197

Proportion estimation   Number of obs = **190,124**

	Proportion	Std. err.	Logit [95% conf. interval]	
NonWhite				
white	.9581957	.000459	.9572867	.9590861
Non-White	.0418043	.000459	.0409139	.0427133

Proportion estimation   Number of obs = **160,059**

	Proportion	Std. err.	Logit [95% conf. interval]	
educationbr				
0	.198683	.0009973	.1967355	.200645
1	.4349271	.0012391	.4325	.4373574
2	.3663899	.0012043	.3640327	.3687535

Proportion estimation   Number of obs = **165,408**

	Proportion	Std. err.	Logit [95% conf. interval]	
householdincome				
1	.2830335	.0011076	.2808676	.2852094
2	.288396	.0011139	.2862177	.290584
3	.2375399	.0010464	.2354951	.2395969
4	.1538438	.0008871	.1521131	.1555906
5	.0371868	.0004653	.0362856	.0381095

Proportion estimation   Number of obs = **190,124**

	Proportion	Std. err.	Logit [95% conf. interval]	
infectionburdenbr				
0	.6371579	.0011027	.6349938	.6393164
1	.3628421	.0011027	.3606836	.3650062

Proportion estimation   Number of obs = **190,124**

	Proportion	Std. err.	Logit [95% conf. interval]	
infectionburdenhospbr				
0	.8734773	.0007624	.8719754	.8749641
1	.1265227	.0007624	.1250359	.1280246

Proportion estimation   Number of obs = **190,124**

	Proportion	Std. err.	Logit [95% conf. interval]	
infectionburden_THREE				
0	.6371579	.0011027	.6349938	.6393164
1	.2363195	.0009743	.2344152	.2382344
2	.1265227	.0007624	.1250359	.1280246

```
74 .
75 .
76 . **Difference by sex**
77 .
78 .
79 . foreach x1 of varlist AGE householdsize townsend LE8* SES infectionburden infectionburdenhosp infectionburden_THRE
  2.          reg `x1' SEX if sample_final==1
  3. }
```

Source	SS	df	MS
Model	30042.6374	1	30042.6374
Residual	10486858	355,044	29.5367842
Total	10516900.6	355,045	29.6213174

Number of obs = 355,046
F(1, 355044) = 1017.13
Prob > F   = 0.0000
R-squared   = 0.0029
Adj R-squared = 0.0029
Root MSE   = 5.4348

AGE	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]	
SEX	-.5832484	.018288	-31.89	0.000	-.6190924	-.5474045
_cons	60.80877	.0295252	2059.55	0.000	60.7509	60.86664

Source	SS	df	MS
Model	1777.4056	1	1777.4056
Residual	486791.186	355,044	1.37107284
Total	488568.592	355,045	1.37607512

Number of obs = 355,046
F(1, 355044) = 1296.36
Prob > F   = 0.0000
R-squared   = 0.0036
Adj R-squared = 0.0036
Root MSE   = 1.1709

households~e	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]	
SEX	-.1418658	.0039402	-36.01	0.000	-.1495884	-.1341432
_cons	2.448314	.0063612	384.88	0.000	2.435846	2.460782

Source	SS	df	MS
Model	114.404627	1	114.404627
Residual	3132719.06	354,738	8.83107832
Total	3132833.47	354,739	8.83137593

Number of obs = 354,740
F(1, 354738) = 12.95
Prob > F   = 0.0003
R-squared   = 0.0000
Adj R-squared = 0.0000
Root MSE   = 2.9717

townsend	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]	
SEX	-.0360077	.0100042	-3.60	0.000	-.0556155	-.0163998
_cons	-1.461482	.0161515	-90.49	0.000	-1.493139	-1.429826

Source	SS	df	MS
Model	9359137.94	1	9359137.94
Residual	332440102	354,958	936.561797
Total	341799240	354,959	962.925972

Number of obs = 354,960
F(1, 354958) = 9993.08
Prob > F   = 0.0000
R-squared   = 0.0274
Adj R-squared = 0.0274
Root MSE   = 30.603

LE8_COMP1D~T	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]	
SEX	10.29573	.1029929	99.97	0.000	10.09387	10.49759
_cons	18.23141	.166281	109.64	0.000	17.90551	18.55732

Source	SS	df	MS			
				Number of obs	=	355,046
				F(1, 355044)	=	454.19
Model	559218.458	1	559218.458	Prob > F	=	0.0000
Residual	437146152	355,044	1231.245	R-squared	=	0.0013
				Adj R-squared	=	0.0013
Total	437705370	355,045	1232.8166	Root MSE	=	35.089

LE8_COMP2PA	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]	
SEX	-2.516375	.1180747	-21.31	0.000	-2.747798	-2.284952
_cons	51.72212	.1906266	271.33	0.000	51.3485	52.09574

Source	SS	df	MS			
				Number of obs	=	355,046
				F(1, 355044)	=	2268.65
Model	1937570.15	1	1937570.15	Prob > F	=	0.0000
Residual	303229849	355,044	854.062734	R-squared	=	0.0063
				Adj R-squared	=	0.0063
Total	305167420	355,045	859.517581	Root MSE	=	29.224

LE8_COMP3N~E	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]	
SEX	4.683961	.0983398	47.63	0.000	4.491218	4.876704
_cons	77.48984	.1587655	488.08	0.000	77.17866	77.80102

Source	SS	df	MS			
				Number of obs	=	353,366
				F(1, 353364)	=	92.10
Model	32645.7151	1	32645.7151	Prob > F	=	0.0000
Residual	125252347	353,364	354.45701	R-squared	=	0.0003
				Adj R-squared	=	0.0003
Total	125284993	353,365	354.548393	Root MSE	=	18.827

LE8_COMP4S~P	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]	
SEX	-.6093798	.0634975	-9.60	0.000	-.7338331	-.4849265
_cons	89.97112	.1024761	877.97	0.000	89.77027	90.17197

Source	SS	df	MS			
				Number of obs	=	353,766
				F(1, 353764)	=	2065.81
Model	1664426.87	1	1664426.87	Prob > F	=	0.0000
Residual	285027803	353,764	805.70042	R-squared	=	0.0058
				Adj R-squared	=	0.0058
Total	286692230	353,765	810.403037	Root MSE	=	28.385

LE8_COMP5BMI	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]	
SEX	4.349266	.0956909	45.45	0.000	4.161715	4.536818
_cons	61.66889	.1545101	399.13	0.000	61.36605	61.97172

Source	SS	df	MS			
				Number of obs	=	307,261
				F(1, 307259)	=	7959.12
Model	7066935.32	1	7066935.32	Prob > F	=	0.0000
Residual	272816589	307,259	887.904306	R-squared	=	0.0252
				Adj R-squared	=	0.0252
Total	279883525	307,260	910.901271	Root MSE	=	29.798

LE8_COMP6L~S	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]	
SEX	-9.608882	.1077061	-89.21	0.000	-9.819983	-9.397781
_cons	62.81034	.1733326	362.37	0.000	62.47061	63.15006

Source	SS	df	MS	Number of obs	=	333,452
				F(1, 333450)	=	1215.46
Model	533823.615	1	533823.615	Prob > F	=	0.0000
Residual	146450035	333,450	439.196385	R-squared	=	0.0036
				Adj R-squared	=	0.0036
Total	146983858	333,451	440.795973	Root MSE	=	20.957

LE8_COMP7G~C	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]	
SEX	2.536208	.072747	34.86	0.000	2.393626	2.67879
_cons	85.6259	.1173074	729.93	0.000	85.39598	85.85581

Source	SS	df	MS	Number of obs	=	333,181
				F(1, 333179)	=	3366.94
Model	3152834.7	1	3152834.7	Prob > F	=	0.0000
Residual	311992252	333,179	936.410313	R-squared	=	0.0100
				Adj R-squared	=	0.0100
Total	315145086	333,180	945.870359	Root MSE	=	30.601

LE8_COMP8BP	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]	
SEX	6.167612	.1062918	58.03	0.000	5.959284	6.375941
_cons	28.6206	.1715711	166.81	0.000	28.28433	28.95688

Source	SS	df	MS	Number of obs	=	355,046
				F(1, 355044)	=	2718.57
Model	24907257	1	24907257	Prob > F	=	0.0000
Residual	3.2529e+09	355,044	9161.88434	R-squared	=	0.0076
				Adj R-squared	=	0.0076
Total	3.2778e+09	355,045	9232.01093	Root MSE	=	95.718

LE8_TOTALS~E	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]	
SEX	16.79374	.3220898	52.14	0.000	16.16246	17.42503
_cons	475.6954	.5200003	914.80	0.000	474.6762	476.7146

Source	SS	df	MS	Number of obs	=	355,046
				F(1, 355044)	=	3064.19
Model	12236523.5	1	12236523.5	Prob > F	=	0.0000
Residual	1.4178e+09	355,044	3993.40166	R-squared	=	0.0086
				Adj R-squared	=	0.0086
Total	1.4301e+09	355,045	4027.85513	Root MSE	=	63.193

LE8_LIFEST~E	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]	
SEX	11.77101	.2126454	55.36	0.000	11.35423	12.18778
_cons	237.3497	.343307	691.36	0.000	236.6768	238.0226

Source	SS	df	MS			
Model	2018003.37	1	2018003.37	Number of obs	=	355,046
Residual	1.5697e+09	355,044	4421.22108	F(1, 355044)	=	456.44
				Prob > F	=	0.0000
				R-squared	=	0.0013
Total	1.5717e+09	355,045	4426.89243	Adj R-squared	=	0.0013
				Root MSE	=	66.492

LE8_BIOLOG~L	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]	
SEX	4.780194	.2237462	21.36	0.000	4.341658	5.21873
_cons	238.4821	.3612288	660.20	0.000	237.7741	239.1901

Source	SS	df	MS			
Model	1604.10864	1	1604.10864	Number of obs	=	355,046
Residual	231929.02	355,044	.653240217	F(1, 355044)	=	2455.62
				Prob > F	=	0.0000
				R-squared	=	0.0069
Total	233533.128	355,045	.65775642	Adj R-squared	=	0.0069
				Root MSE	=	.80823

LE8_TOTALS~t	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]	
SEX	.1347725	.0027197	49.55	0.000	.129442	.1401031
_cons	1.749106	.0043908	398.35	0.000	1.7405	1.757712

Source	SS	df	MS			
Model	128.825906	1	128.825906	Number of obs	=	355,046
Residual	169984.003	355,044	.478768838	F(1, 355044)	=	269.08
				Prob > F	=	0.0000
				R-squared	=	0.0008
Total	170112.829	355,045	.479130334	Adj R-squared	=	0.0008
				Root MSE	=	.69193

SES	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]	
SEX	-.0381932	.0023283	-16.40	0.000	-.0427567	-.0336297
_cons	.0131197	.003759	3.49	0.000	.0057522	.0204873

Source	SS	df	MS			
Model	1790.29084	1	1790.29084	Number of obs	=	355,046
Residual	671017.962	355,044	1.8899572	F(1, 355044)	=	947.27
				Prob > F	=	0.0000
				R-squared	=	0.0027
Total	672808.253	355,045	1.89499431	Adj R-squared	=	0.0027
				Root MSE	=	1.3748

infectionb~n	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]	
SEX	.1423791	.0046261	30.78	0.000	.1333122	.1514461
_cons	.52758	.0074686	70.64	0.000	.5129418	.5422182

Source	SS	df	MS			
Model	21.9563383	1	21.9563383	Number of obs	=	355,046
Residual	275908.002	355,044	.777109321	F(1, 355044)	=	28.25
				Prob > F	=	0.0000
				R-squared	=	0.0001
Total	275929.958	355,045	.777168973	Adj R-squared	=	0.0001
				Root MSE	=	.88154

infec~enhosp	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]	
SEX	.0157676	.0029664	5.32	0.000	.0099536	.0215816
_cons	.2354906	.0047891	49.17	0.000	.2261042	.2448771

Source	SS	df	MS		Number of obs	=	355,046
					F(1, 355044)	=	123.24
Model	62.00719	1	62.00719		Prob > F	=	0.0000
Residual	178636.595	355,044	.503139315		R-squared	=	0.0003
					Adj R-squared	=	0.0003
Total	178698.602	355,045	.503312544		Root MSE	=	.70932

infectionb~E	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]	
SEX	.0264975	.0023869	11.10	0.000	.0218193	.0311757
_cons	.4363698	.0038535	113.24	0.000	.428817	.4439225

```
80 .
81 .
82 .
83 . foreach x2 of varlist dem_diag ad_diag  RACE_ETHN NonWhite educationbr householdincome infectionburdenbr infection
   2.          mlogit `x2' SEX if sample_final==1
   3.
84 . }
```

```
Iteration 0:   log likelihood = -31783.852
Iteration 1:   log likelihood = -31705.633
Iteration 2:   log likelihood = -31705.162
Iteration 3:   log likelihood = -31705.162
```

Multinomial logistic regression

```
Number of obs = 355,046
LR chi2(1)    =  157.38
Prob > chi2   =  0.0000
```
Log likelihood = -31705.162

```
Pseudo R2     =  0.0025
```

dem_diag	Coefficient	Std. err.	z	P>|z|	[95% conf. interval]	
0	(base outcome)					
1						
SEX	-.3184823	.025447	-12.52	0.000	-.3683576	-.2686071
_cons	-3.531331	.0392299	-90.02	0.000	-3.60822	-3.454442

```
Iteration 0:   log likelihood = -15692.268
Iteration 1:   log likelihood = -15687.288
Iteration 2:   log likelihood = -15687.283
Iteration 3:   log likelihood = -15687.283
```

Multinomial logistic regression

```
Number of obs = 355,046
LR chi2(1)    =     9.97
Prob > chi2   =  0.0016
```
Log likelihood = -15687.283

```
Pseudo R2     =  0.0003
```

ad_diag	Coefficient	Std. err.	z	P>|z|	[95% conf. interval]	
0	(base outcome)					
1						
SEX	-.1228656	.0388909	-3.16	0.002	-.1990904	-.0466408
_cons	-4.697703	.061687	-76.15	0.000	-4.818608	-4.576799

```
Iteration 0:   log likelihood = -77686.858
Iteration 1:   log likelihood =  -77578.58
Iteration 2:   log likelihood = -77578.044
Iteration 3:   log likelihood = -77578.044
```

Multinomial logistic regression

```
Number of obs = 355,046
LR chi2(3)    =   217.63
Prob > chi2   =   0.0000
```

Log likelihood = -77578.044

```
Pseudo R2     =   0.0014
```

RACE_ETHN	Coefficient	Std. err.	z	P>|z|	[95% conf. interval]	
0	(base outcome)					
1						
SEX	.2165224	.0331764	6.53	0.000	.151498	.2815469
_cons	-4.834672	.0551609	-87.65	0.000	-4.942786	-4.726559
2						
SEX	-.3245292	.0279429	-11.61	0.000	-.3792964	-.269762
_cons	-3.687135	.0429927	-85.76	0.000	-3.771399	-3.602871
3						
SEX	.1597547	.0267962	5.96	0.000	.1072351	.2122743
_cons	-4.32121	.0442159	-97.73	0.000	-4.407872	-4.234549

```
Iteration 0:   log likelihood = -61616.219
Iteration 1:   log likelihood = -61616.215
```

Multinomial logistic regression

```
Number of obs = 355,046
LR chi2(1)    =     0.01
Prob > chi2   =   0.9250
```

Log likelihood = -61616.215

```
Pseudo R2     =   0.0000
```

NonWhite	Coefficient	Std. err.	z	P>|z|	[95% conf. interval]	
white	(base outcome)					
Non_White						
SEX	.0015826	.0168196	0.09	0.925	-.0313832	.0345484
_cons	-3.135218	.0271602	-115.43	0.000	-3.188451	-3.081985

```
Iteration 0:   log likelihood = -314998.94
Iteration 1:   log likelihood = -313786.56
Iteration 2:   log likelihood = -313785.94
Iteration 3:   log likelihood = -313785.94
```

Multinomial logistic regression

				Number of obs	= **295,455**
				LR chi2(**2**)	= **2426.00**
				Prob > chi2	= **0.0000**
Log likelihood = **-313785.94**				Pseudo R2	= **0.0039**

educationbr	Coefficient	Std. err.	z	P>|z|	[95% conf. interval]	
0						
SEX	-.4144184	.0098926	-41.89	0.000	-.4338074	-.3950293
_cons	.0453688	.015938	2.85	0.004	.0141309	.0766067
1	(base outcome)					
2						
SEX	-.3450113	.0084013	-41.07	0.000	-.3614776	-.328545
_cons	.5185422	.0137142	37.81	0.000	.4916629	.5454215

Iteration 0:   log likelihood = **-475787.7**
Iteration 1:   log likelihood = **-474740.89**
Iteration 2:   log likelihood = **-474739.24**
Iteration 3:   log likelihood = **-474739.24**

Multinomial logistic regression

				Number of obs	= **318,904**
				LR chi2(**4**)	= **2096.92**
				Prob > chi2	= **0.0000**
Log likelihood = **-474739.24**				Pseudo R2	= **0.0022**

householdi~e	Coefficient	Std. err.	z	P>|z|	[95% conf. interval]	
1						
SEX	.1166475	.0097312	11.99	0.000	.0975746	.1357203
_cons	-.2520642	.0158688	-15.88	0.000	-.2831664	-.220962
2	(base outcome)					
3						
SEX	-.1502283	.0098153	-15.31	0.000	-.1694658	-.1309907
_cons	.1064577	.0156881	6.79	0.000	.0757096	.1372057
4						
SEX	-.3045842	.0108825	-27.99	0.000	-.3259136	-.2832548
_cons	-.019228	.0171154	-1.12	0.261	-.0527736	.0143176
5						
SEX	-.4080464	.018272	-22.33	0.000	-.443859	-.3722339
_cons	-1.232287	.0280153	-43.99	0.000	-1.287196	-1.177378

Iteration 0:   log likelihood = **-229903.6**
Iteration 1:   log likelihood = **-229758.29**
Iteration 2:   log likelihood = **-229758.28**

Multinomial logistic regression

				Number of obs	= **355,046**
				LR chi2(**1**)	= **290.63**
				Prob > chi2	= **0.0000**
Log likelihood = **-229758.28**				Pseudo R2	= **0.0006**

infectio~nbr	Coefficient	Std. err.	z	P>|z|	[95% conf. interval]	
0	(base outcome)					
1						
SEX	.1203995	.0070675	17.04	0.000	.1065476	.1342515
_cons	-.8038486	.0114692	-70.09	0.000	-.8263279	-.7813693

```
Iteration 0:   log likelihood = -135090.44
Iteration 1:   log likelihood = -135090.15
Iteration 2:   log likelihood = -135090.15
```

Multinomial logistic regression

```
Number of obs = 355,046
LR chi2(1)    =      0.58
Prob > chi2   =    0.4466
Pseudo R2     =    0.0000
```

Log likelihood = -135090.15

inf~enhospbr	Coefficient	Std. err.	z	P>|z|	[95% conf. interval]	
0	(base outcome)					
1						
SEX	-.0076934	.0101067	-0.76	0.447	-.0275021	.0121153
_cons	-1.916674	.0163034	-117.56	0.000	-1.948628	-1.88472

```
Iteration 0:   log likelihood = -311309.18
Iteration 1:   log likelihood = -311100.32
Iteration 2:   log likelihood = -311100.22
Iteration 3:   log likelihood = -311100.22
```

Multinomial logistic regression

```
Number of obs = 355,046
LR chi2(2)    =    417.92
Prob > chi2   =    0.0000
Pseudo R2     =    0.0007
```

Log likelihood = -311100.22

infectionb~E	Coefficient	Std. err.	z	P>|z|	[95% conf. interval]	
0	(base outcome)					
1						
SEX	.1691158	.0082929	20.39	0.000	.1528621	.1853695
_cons	-1.330064	.0135481	-98.17	0.000	-1.356618	-1.303511
2						
SEX	.0353129	.0103225	3.42	0.001	.0150811	.0555446
_cons	-1.687222	.0166354	-101.42	0.000	-1.719826	-1.654617

```
85 .
86 .
87 .
88 .
89 . *****************************************************ALL INFECTIONS: TABLES 2 AND 3*************************
90 .
91 . capture log close
```