

Attachment H. NIOSH Sampling Approach for Partnering Organizations

Attachment H1: Organizations with greater than 3,000 members with email addresses

Simple random sample

In order to conduct a survey of your members, your organization will need to prepare a targeted sampling frame. This will involve the following steps: 1) generate a list of members with email addresses; 2) filter out members such as retirees, students, administrators/directors/managers, educators, and others who are not likely exposed to [insert relevant chemical agent(s)], 3) retain members who are likely to use or come in contact with these chemical agents, and 4) draw a random sample from the filtered/targeted membership population. A quality check of the sampling frame needs to be performed to ensure that excluded members are not in the sample.

Our goal is to obtain 1,000 completed surveys (i.e., hazard module and core module). Assuming a 50% response rate, a sample size of 2,000 will be necessary to ensure that we meet our goal.

Step-by-step instructions on how to select a random sample from a list of individuals (using MS Excel) is provided. NIOSH can provide assistance to your staff with this process, if requested.

The sample will need to be drawn within two months of launching the survey to verify that the sample is current. The survey is scheduled to be launched in late January 2011.

For quality assurance purposes, a written description of the steps taken to prepare the sampling frame will need to be provided to NIOSH.

Microsoft Excel - RANDOM NAMES.30.xls

File Edit View Insert Format Tools Data Window Help

Type a question for help

Arial 10 B I U

D3 =RAND()

	A	B	C	D	E	F	G	H	I	J	K	L
1	1st name	last name	email	random #								
2	Sterling	Faye	Sterling.Faye@mail.com	0.9735207781								
3	Dimple	Marci	Dimple.Marci@mail.com	0.3479278258								
4	Selina	Lavinia	Selina.Lavinia@mail.com	0.5146544198								
5	Diego	Kirby	Diego.Kirby@mail.com	0.4290558972								
6	Jessie	Scot	Jessie.Scot@mail.com	0.9854094488								
7	Ramona	Santiago	Ramona.Santiago@mail.com	0.3259903727								
8	Montserrat	Ricky	Montserrat.Ricky@mail.com	0.3977031591								
9	Jazmin	Dawn	Jazmin.Dawn@mail.com	0.6826223991								
10	Adella	Luis	Adella.Luis@mail.com	0.8267380339								
11	Antonia	Alison	Antonia.Alison@mail.com	0.7997136077								
12	Melissa	Hosie	Melissa.Hosie@mail.com	0.7534079810								
13	Paul	Yvette	Paul.Yvette@mail.com	0.9732964173								
14	Tonya	Nick	Tonya.Nick@mail.com	0.9278002128								
15	Kai	Talia	Kai.Talia@mail.com	0.1380970257								
16	Merna	Baron	Merna.Baron@mail.com	0.6005409980								
17	Lorena	Norman	Lorena.Norman@mail.com	0.5159282829								
18	Fleta	Johanna	Fleta.Johanna@mail.com	0.0743017494								
19	Clare	Jill	Clare.Jill@mail.com	0.3635714519								
20	Gracie	Payten	Gracie.Payten@mail.com	0.7523457592								
21	Horace	Burley	Horace.Burley@mail.com	0.2015144806								
22	Tracy	Ann	Tracy.Ann@mail.com	0.1612512218								
23	Diamond	James	Diamond.James@mail.com	0.9969338757								
24	Leroy	Gustav	Leroy.Gustav@mail.com	0.8563909537								
25	Sade	Elton	Sade.Elton@mail.com	0.7447487207								
26	Troy	Carolina	Troy.Carolina@mail.com	0.3217837906								
27	Werner	Ezekiel	Werner.Ezekiel@mail.com	0.0048664958								
28	Georgia	Pamela	Georgia.Pamela@mail.com	0.1263685769								
29	Art	Roland	Art.Roland@mail.com	0.7610938310								
30	Zachary	Booker	Zachary.Booker@mail.com	0.2122099279								
31												
32												
33												

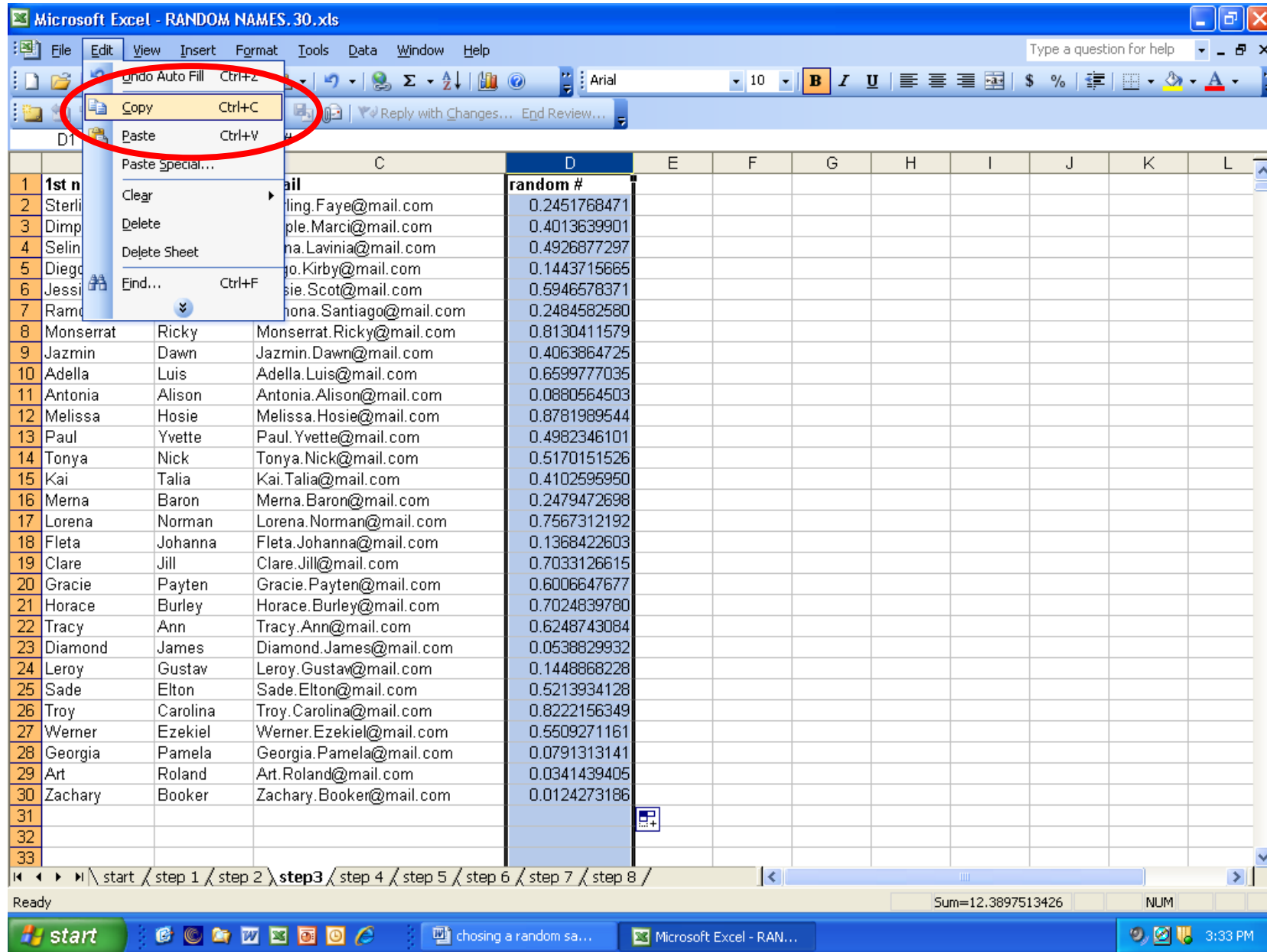
start step 1 step 2 step 3 step 4 step 5 step 6 step 7 step 8

Ready Sum=14.7962669168 NUM

start chosing a random sa... Microsoft Excel - RAN... 3:31 PM

Step 3

Now, highlight column D with the random numbers in it and go to "Edit" and copy the column.



The screenshot shows the Microsoft Excel interface with a spreadsheet titled "RANDOM NAMES.30.xls". The spreadsheet has columns labeled C, D, E, F, G, H, I, J, K, and L. Column C contains names and email addresses, and column D contains random numbers. A context menu is open over column D, with the "Copy" option highlighted. The menu also includes options like "Paste", "Paste Special...", "Clear", "Delete", "Delete Sheet", and "Find...". The status bar at the bottom shows "Sum=12.3897513426" and "NUM".

	C	D	E	F	G	H	I	J	K	L
1	mail	random #								
2	ling.Faye@mail.com	0.2451768471								
3	ple.Marci@mail.com	0.4013639901								
4	na.Lavinia@mail.com	0.4926877297								
5	go.Kirby@mail.com	0.1443715665								
6	sie.Scot@mail.com	0.5946578371								
7	ona.Santiago@mail.com	0.2484582580								
8	Monserrat Ricky Monserrat.Ricky@mail.com	0.8130411579								
9	Jazmin Dawn Jazmin.Dawn@mail.com	0.4063864725								
10	Adella Luis Adella.Luis@mail.com	0.6599777035								
11	Antonia Alison Antonia.Alison@mail.com	0.0880564503								
12	Melissa Hosie Melissa.Hosie@mail.com	0.8781989544								
13	Paul Yvette Paul.Yvette@mail.com	0.4982346101								
14	Tonya Nick Tonya.Nick@mail.com	0.5170151526								
15	Kai Talia Kai.Talia@mail.com	0.4102595950								
16	Merna Baron Merna.Baron@mail.com	0.2479472698								
17	Lorena Norman Lorena.Norman@mail.com	0.7567312192								
18	Fleta Johanna Fleta.Johanna@mail.com	0.1368422603								
19	Clare Jill Clare.Jill@mail.com	0.7033126615								
20	Gracie Payten Gracie.Payten@mail.com	0.6006647677								
21	Horace Burley Horace.Burley@mail.com	0.7024839780								
22	Tracy Ann Tracy.Ann@mail.com	0.6248743084								
23	Diamond James Diamond.James@mail.com	0.0538829932								
24	Leroy Gustav Leroy.Gustav@mail.com	0.1448868228								
25	Sade Elton Sade.Elton@mail.com	0.5213934128								
26	Troy Carolina Troy.Carolina@mail.com	0.8222156349								
27	Werner Ezekiel Werner.Ezekiel@mail.com	0.5509271161								
28	Georgia Pamela Georgia.Pamela@mail.com	0.0791313141								
29	Art Roland Art.Roland@mail.com	0.0341439405								
30	Zachary Booker Zachary.Booker@mail.com	0.0124273186								
31										
32										
33										

Step 4

Step 6. Highlight the column with the formula (column D)

Microsoft Excel - RANDOM NAMES, 30.xls

File Edit View Insert Format Tools Data Window Help

Type a question for help

Arial 10 B I U

D2 =RAND()

	A	B	C	D	E	F	G	H	I	J	K
1	1st name	last name	email	random #	random #						
2	Sterling	Faye	Sterling.Faye@mail.com	0.0387288003	0.201641918						
3	Dimple	Marci	Dimple.Marci@mail.com	0.0616885758	0.971294805						
4	Selina	Lavinia	Selina.Lavinia@mail.com	0.1241402266	0.483891821						
5	Diego	Kirby	Diego.Kirby@mail.com	0.3134423646	0.188780068						
6	Jessie	Scot	Jessie.Scot@mail.com	0.9770370415	0.934739815						
7	Ramona	Santiago	Ramona.Santiago@mail.com	0.8947360544	0.679718618						
8	Montserrat	Ricky	Montserrat.Ricky@mail.com	0.6282610775	0.815878306						
9	Jazmin	Dawn	Jazmin.Dawn@mail.com	0.5774026934	0.441504115						
10	Adella	Luis	Adella.Luis@mail.com	0.6753932584	0.724640018						
11	Antonia	Alison	Antonia.Alison@mail.com	0.3309047687	0.049976609						
12	Melissa	Hosie	Melissa.Hosie@mail.com	0.1091899400	0.785875376						
13	Paul	Yvette	Paul.Yvette@mail.com	0.5085582016	0.138548821						
14	Tonya	Nick	Tonya.Nick@mail.com	0.7837107163	0.033460277						
15	Kai	Talia	Kai.Talia@mail.com	0.5196130142	0.452413588						
16	Merna	Baron	Merna.Baron@mail.com	0.8183325331	0.302079504						
17	Lorena	Norman	Lorena.Norman@mail.com	0.9672667906	0.239877893						
18	Fleta	Johanna	Fleta.Johanna@mail.com	0.7513127043	0.313746485						
19	Clare	Jill	Clare.Jill@mail.com	0.5011709470	0.11709121						
20	Gracie	Payten	Gracie.Payten@mail.com	0.6584333601	0.870271123						
21	Horace	Burley	Horace.Burley@mail.com	0.8517304547	0.118116002						
22	Tracy	Ann	Tracy.Ann@mail.com	0.3109392142	0.079263568						
23	Diamond	James	Diamond.James@mail.com	0.7493087995	0.211198019						
24	Leroy	Gustav	Leroy.Gustav@mail.com	0.0450106473	0.876973875						
25	Sade	Elton	Sade.Elton@mail.com	0.9702812914	0.304596156						
26	Troy	Carolina	Troy.Carolina@mail.com	0.1272481119	0.96724472						
27	Werner	Ezekiel	Werner.Ezekiel@mail.com	0.0557218944	0.658539501						
28	Georgia	Pamela	Georgia.Pamela@mail.com	0.0043287241	0.538183744						
29	Art	Roland	Art.Roland@mail.com	0.5778520208	0.160794243						
30	Zachary	Booker	Zachary.Booker@mail.com	0.7308207097	0.524201642						
31											
32											
33											

Ready Sum=14.6625649365 NUM

start Random Samplin... My Documents Microsoft Excel -... chosing a rando... 3:43 PM

and delete it (Edit→Delete)

The screenshot shows a Microsoft Excel window titled "RANDOM NAMES.30.xls". The spreadsheet has three columns: "1st n", "email", and "random #". The "1st n" column contains names, the "email" column contains email addresses, and the "random #" column contains random numbers. A context menu is open over cell D1, with the "Delete" option highlighted by a red circle. The spreadsheet is currently on "Sheet 6" of a workbook with 9 sheets.

	C	D	E	F	G	H	I	J	K
1	1st n	email		random #					
2	Sterli	Sterling.Faye@mail.com		0.201641918					
3	Dimp	Dimple.Marci@mail.com		0.971294805					
4	Selina	Lavinia Selina.Lavinia@mail.com		0.483891821					
5	Diego	Kirby Diego.Kirby@mail.com		0.188780068					
6	Jessie	Scot Jessie.Scot@mail.com		0.934739815					
7	Ramona	Santiago Ramona.Santiago@mail.com		0.679718618					
8	Montserrat	Ricky Monserrat.Ricky@mail.com		0.815878306					
9	Jazmin	Dawn Jazmin.Dawn@mail.com		0.441504115					
10	Adella	Luis Adella.Luis@mail.com		0.724640018					
11	Antonia	Alison Antonia.Alison@mail.com		0.049976609					
12	Melissa	Hosie Melissa.Hosie@mail.com		0.785875376					
13	Paul	Yvette Paul.Yvette@mail.com		0.138548821					
14	Tonya	Nick Tonya.Nick@mail.com		0.033460277					
15	Kai	Talia Kai.Talia@mail.com		0.452413588					
16	Merna	Baron Merna.Baron@mail.com		0.302079504					
17	Lorena	Norman Lorena.Norman@mail.com		0.239877893					
18	Fleta	Johanna Fleta.Johanna@mail.com		0.313746485					
19	Clare	Jill Clare.Jill@mail.com		0.11709121					
20	Gracie	Payten Gracie.Payten@mail.com		0.870271123					
21	Horace	Burley Horace.Burley@mail.com		0.118116002					
22	Tracy	Ann Tracy.Ann@mail.com		0.079263568					
23	Diamond	James Diamond.James@mail.com		0.211198019					
24	Leroy	Gustav Leroy.Gustav@mail.com		0.876973875					
25	Sade	Elton Sade.Elton@mail.com		0.304596156					
26	Troy	Carolina Troy.Carolina@mail.com		0.96724472					
27	Werner	Ezekiel Werner.Ezekiel@mail.com		0.658539501					
28	Georgia	Pamela Georgia.Pamela@mail.com		0.538183744					
29	Art	Roland Art.Roland@mail.com		0.160794243					
30	Zachary	Booker Zachary.Booker@mail.com		0.524201642					
31									
32									
33									

Step 7.

Highlight all cells in spreadsheet by clicking the square in the left hand corner of the spreadsheet.

Microsoft Excel - RANDOM NAMES.30.xls

File Edit View Insert Format Tools Data Window Help

Type a question for help

Arial 10 B I U

Reply with Changes... End Review...

A1 1st name

1	1st name	last name	email	random #										
2	Sterling	Faye	Sterling.Faye@mail.com	0.231291										
3	Dimple	Marci	Dimple.Marci@mail.com	0.41256										
4	Selina	Lavinia	Selina.Lavinia@mail.com	0.706923										
5	Diego	Kirby	Diego.Kirby@mail.com	0.693652										
6	Jessie	Scot	Jessie.Scot@mail.com	0.086447										
7	Ramona	Santiago	Ramona.Santiago@mail.com	0.998352										
8	Montserrat	Ricky	Montserrat.Ricky@mail.com	0.302089										
9	Jazmin	Dawn	Jazmin.Dawn@mail.com	0.502783										
10	Adella	Luis	Adella.Luis@mail.com	0.530638										
11	Antonia	Alison	Antonia.Alison@mail.com	0.490617										
12	Melissa	Hosie	Melissa.Hosie@mail.com	0.270253										
13	Paul	Yvette	Paul.Yvette@mail.com	0.370738										
14	Tonya	Nick	Tonya.Nick@mail.com	0.913081										
15	Kai	Talia	Kai.Talia@mail.com	0.721916										
16	Merna	Baron	Merna.Baron@mail.com	0.059292										
17	Lorena	Norman	Lorena.Norman@mail.com	0.013785										
18	Fleta	Johanna	Fleta.Johanna@mail.com	0.029567										
19	Clare	Jill	Clare.Jill@mail.com	0.462599										
20	Gracie	Payten	Gracie.Payten@mail.com	0.885399										
21	Horace	Burley	Horace.Burley@mail.com	0.133226										
22	Tracy	Ann	Tracy.Ann@mail.com	0.045388										
23	Diamond	James	Diamond.James@mail.com	0.786374										
24	Leroy	Gustav	Leroy.Gustav@mail.com	0.983685										
25	Sade	Elton	Sade.Elton@mail.com	0.870421										
26	Troy	Carolina	Troy.Carolina@mail.com	0.211305										
27	Werner	Ezekiel	Werner.Ezekiel@mail.com	0.146005										
28	Georgia	Pamela	Georgia.Pamela@mail.com	0.175738										
29	Art	Roland	Art.Roland@mail.com	0.721549										
30	Zachary	Booker	Zachary.Booker@mail.com	0.760432										
31														
32														
33														

Ready Sum=13.51610563 NUM

start Random Sampling usi... My Documents Microsoft Excel - RAN... 3:56 PM

Step 8. Choose Data, then Sort

The screenshot shows the Microsoft Excel interface with the 'Data' menu open. The 'Sort...' option is highlighted with a red circle. The spreadsheet contains a table with columns for '1st name', 'last name', 'email', and a numerical column. The status bar at the bottom shows 'Sum=13.51610563' and 'NUM'.

	A	B		
1	1st name	last name	email	
2	Lorena	Norman	Lorena.Norr	
3	Fleta	Johanna	Fleta.Johan	
4	Tracy	Ann	Tracy.Ann@	
5	Merna	Baron	Merna.Bar	
6	Jessie	Scot	Jessie.Scot	
7	Horace	Burley	Horace.Bur	
8	Werner	Ezekiel	Werner.Eze	
9	Georgia	Pamela	Georgia.Pa	
10	Troy	Carolina	Troy.Carolin	
11	Sterling	Faye	Sterling.Faye@mail.com	0.231291
12	Melissa	Hosie	Melissa.Hosie@mail.com	0.270253
13	Montserrat	Ricky	Montserrat.Ricky@mail.com	0.302089
14	Paul	Yvette	Paul.Yvette@mail.com	0.370738
15	Dimple	Marci	Dimple.Marci@mail.com	0.41256
16	Clare	Jill	Clare.Jill@mail.com	0.462599
17	Antonia	Alison	Antonia.Alison@mail.com	0.490617
18	Jazmin	Dawn	Jazmin.Dawn@mail.com	0.502783
19	Adella	Luis	Adella.Luis@mail.com	0.530638
20	Diego	Kirby	Diego.Kirby@mail.com	0.693652
21	Selina	Lavinia	Selina.Lavinia@mail.com	0.706923
22	Art	Roland	Art.Roland@mail.com	0.721549
23	Kai	Talia	Kai.Talia@mail.com	0.721916
24	Zachary	Booker	Zachary.Booker@mail.com	0.760432
25	Diamond	James	Diamond.James@mail.com	0.786374
26	Sade	Elton	Sade.Elton@mail.com	0.870421
27	Gracie	Payten	Gracie.Payten@mail.com	0.885399
28	Tonya	Nick	Tonya.Nick@mail.com	0.913081
29	Leroy	Gustav	Leroy.Gustav@mail.com	0.983685
30	Ramona	Santiago	Ramona.Santiago@mail.com	0.998352
31				
32				
33				

Step 7.

Sort by "random#" (column D). With the "Ascending" button chosen. Click "Ok".

Microsoft Excel - RANDOM NAMES.30.xls

File Edit View Insert Format Tools Data Window Help

Type a question for help

A2 Lorena

	A	B	C	D	E	F	G	H	I	J	K	L
1	1st name	last name	email	random #								
2	Lorena	Norman	Lorena.Norman@mail.com	0.013785								
3	Fleta	Johanna	Fleta.Johanna@mail.com	0.029567								
4	Tracy	Ann	Tracy.Ann@mail.com	0.045388								
5	Merna	Baron	Merna.Baron@mail.com									
6	Jessie	Scot	Jessie.Scot@mail.com									
7	Horace	Burley	Horace.Burley@mail.com									
8	Werner	Ezekiel	Werner.Ezekiel@mail.com									
9	Georgia	Pamela	Georgia.Pamela@mail.com									
10	Troy	Carolina	Troy.Carolina@mail.com									
11	Sterling	Faye	Sterling.Faye@mail.com									
12	Melissa	Hosie	Melissa.Hosie@mail.com									
13	Monserrat	Ricky	Montserrat.Ricky@mail.com									
14	Paul	Yvette	Paul.Yvette@mail.com									
15	Dimple	Marci	Dimple.Marci@mail.com									
16	Clare	Jill	Clare.Jill@mail.com									
17	Antonia	Alison	Antonia.Alison@mail.com									
18	Jazmin	Dawn	Jazmin.Dawn@mail.com									
19	Adella	Luis	Adella.Luis@mail.com									
20	Diego	Kirby	Diego.Kirby@mail.com									
21	Selina	Lavinia	Selina.Lavinia@mail.com									
22	Art	Roland	Art.Roland@mail.com	0.721549								
23	Kai	Talia	Kai.Talia@mail.com	0.721916								
24	Zachary	Booker	Zachary.Booker@mail.com	0.760432								
25	Diamond	James	Diamond.James@mail.com	0.786374								
26	Sade	Elton	Sade.Elton@mail.com	0.870421								
27	Gracie	Payten	Gracie.Payten@mail.com	0.885399								
28	Tonya	Nick	Tonya.Nick@mail.com	0.913081								
29	Leroy	Gustav	Leroy.Gustav@mail.com	0.983685								
30	Ramona	Santiago	Ramona.Santiago@mail.com	0.998352								
31												
32												
33												

Sort

Sort by: random # Ascending Descending

Then by: Ascending Descending

Then by: Ascending Descending

My data range has Header row No header row

Options... OK Cancel

start step 1 step 2 step 3 step 4 step 5 Sheet 6 step 7 **step 8** step 9

Ready Sum=13.51610563 NUM 3:51 PM

Step 8.

Note that in column "D" numbers are in order from smallest to largest. Since our sample size for this exercise was 10, the first 10 people (rows 2 to 11) in the list are now our sample and the others can be deleted.

Microsoft Excel - RANDOM NAMES.30.xls

File Edit View Insert Format Tools Data Window Help

Type a question for help

Arial 10 B I U

0.0137847590350635

	A	B	C	D	E	F	G	H	I	J	K	L
1	1st name	last name	email	random #								
2	Lorena	Norman	Lorena.Norman@mail.com	0.013784759								
3	Fleta	Johanna	Fleta.Johanna@mail.com	0.029567293								
4	Tracy	Ann	Tracy.Ann@mail.com	0.045387961								
5	Merna	Baron	Merna.Baron@mail.com	0.059292279								
6	Jessie	Scot	Jessie.Scot@mail.com	0.086447046								
7	Horace	Burley	Horace.Burley@mail.com	0.133226059								
8	Werner	Ezekiel	Werner.Ezekiel@mail.com	0.146004685								
9	Georgia	Pamela	Georgia.Pamela@mail.com	0.175737748								
10	Troy	Carolina	Troy.Carolina@mail.com	0.211304555								
11	Sterling	Faye	Sterling.Faye@mail.com	0.231290745								
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
32												
33												

start / step 1 / step 2 / step 3 / step 4 / step 5 / Sheet 6 / step 7 / step 8 / step 9 /

Ready NUM

start Random Sampling usi... My Documents Microsoft Excel - RAN... 3:53 PM