

ATTACHMENT 4

Power and Sample Size Calculation Table

Attachment 4

**Sample Size and Power to Detect Statistically Significant
Intervention Effects**

Number of

Communities

Sampl
e

Clust
er

Inter
venti
on

Size

Corre
latio
n

Effec
t

Power

2

100

0.01

0.2

2

0.14

300

0.01

2

0.2

0.18

500

0.01

0.2

2

0.19

1
0
0
0

0
.
0
1

0
.
2

0
.
2
0

2

3000

	0.01
	0.2
	0.21
4	
	100
	0.01
	0.2
4	0.39
	300
	0.01
	0.2
4	0.54
	500
	0.01
	0.2
4	0.58
	1000
	0.01

	0.2
4	0.62
	3000
	0.01
	0.2
5	0.64
	100
	0.01
	0.2
5	0.50
	300
	0.01
	0.2
5	0.67
	500
	0.01

5

0.2

0.72

1
0
0
0

0
.
0
1

0
.
2

0
.
7
5

5

3000

0.01

0.2

0.78

6

100

	0.01
	0.2
6	0.60
	300
	0.01
	0.2
6	0.77
	500
	0.01
	0.2
6	0.81
	1000
	0.01
	0.2
6	0.84
	3000
	0.01

	0.2
	0.87
8	
	100
	0.01
	0.2
8	0.75
	300
	0.01
	0.2
8	0.90
	500
	0.01
	0.2
8	0.94
	1000
	0.01

8

0.2

0.95

3000

0.01

0.2

10

0.95

100

0.01

0.2

10

0.85

300

0.01

0.2

10

0.96

500

0.01

	0.2
10	0.97
	1000
	0.01
	0.2
10	0.98
	3000
	0.01
	0.2
	0.99

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Calculations derived from computer program created by Donner A, Klar N. Statistical Considerations in the Design and Analysis of Community Intervention Trial. J Clin. Epidemiol. 1996;49:435-439.