

1 Cesarean section and transmission of HIV

MODE OF DELIVERY	COVARIATE			No. OF MOTHER- CHILD PAIRS	No. OF HIV-1- INFECTED CHILDREN
	NO. OF PERIODS OF ANTIRETROVIRAL THERAPY	ADVANCED MATERNAL DISEASE	LOW BIRTH WEIGHT OF INFANT (<2500 g)		
Elective cesarean	0	No	No	372	30
Other	0	No	No	3850	652
Elective cesarean	0	Yes	No	28	5
Other	0	Yes	No	303	74
Elective cesarean	0	No	Yes	110	17
Other	0	No	Yes	767	196
Elective cesarean	0	Yes	Yes	27	4
Other	0	Yes	Yes	114	40
Elective cesarean	1 or 2	No	No	41	0
Other	1 or 2	No	No	441	49
Elective cesarean	1 or 2	Yes	No	23	3
Other	1 or 2	Yes	No	186	33
Elective cesarean	1 or 2	No	Yes	7	0
Other	1 or 2	No	Yes	83	22
Elective cesarean	1 or 2	Yes	Yes	10	3
Other	1 or 2	Yes	Yes	54	19
Elective cesarean	3	No	No	124	2
Other	3	No	No	878	49
Elective cesarean	3	Yes	No	34	1
Other	3	Yes	No	208	24
Elective cesarean	3	No	Yes	25	0
Other	3	No	Yes	109	11
Elective cesarean	3	Yes	Yes	8	1
Other	3	Yes	Yes	38	6

```
## open          0.2899      0.1911      1.517      0.129
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for binomial family taken to be 1)
##
##      Null deviance: 2.3148e+00  on 1  degrees of freedom
## Residual deviance: 9.9920e-15  on 0  degrees of freedom
## AIC: 15.696
##
## Number of Fisher Scoring iterations: 3
```

```
##
## Call:
## glm(formula = cbind(cases, controls) ~ open, family = binomial(link = "logit"),
##      data = df)
##
## Deviance Residuals:
## [1]  0  0
##
## Coefficients:
##              Estimate Std. Error z value Pr(>|z|)
## (Intercept) -1.5556      0.1409 -11.040  <2e-16 ***
```

2 Smoking among women in Whickham, England

Age	Vital Status	Smoking		Total
		Yes	No	
18-24	Dead	2	1	3
	Alive	53	61	114
	Risk	0.04	0.02	0.03
25-34	Dead	3	5	8
	Alive	121	152	273
	Risk	0.02	0.03	0.03
35-44	Dead	14	7	21
	Alive	95	114	209
	Risk	0.13	0.06	0.09
45-54	Dead	27	12	39
	Alive	103	66	169
	Risk	0.21	0.15	0.19
55-64	Dead	51	40	91
	Alive	64	81	145
	Risk	0.44	0.33	0.39
65-74	Dead	29	101	130
	Alive	7	28	35
	Risk	0.81	0.78	0.79
75+	Dead	13	64	77
	Alive	0	0	0
	Risk	1.00	1.00	1.00

```
## size          1.2606      0.2390   5.274 1.33e-07 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for binomial family taken to be 1)
##
##      Null deviance: 33.1239  on 3  degrees of freedom
## Residual deviance:  1.0082  on 1  degrees of freedom
## AIC: 26.355
##
## Number of Fisher Scoring iterations: 3
```

```
##
## Call:
## glm(formula = cbind(cases, controls) ~ open + size, family = binomial(link = "logit"),
##      data = df)
##
## Deviance Residuals:
##      1       2       3       4
## -0.7636  0.3588  0.2756 -0.4695
##
## Coefficients:
##              Estimate Std. Error z value Pr(>|z|)
## (Intercept)  -1.9366     0.1704 -11.361  < 2e-16 ***
## open         -0.3572     0.2291  -1.559   0.119
```

3 Diabetes cohort data 1

	Dead	Censored	Total
Type II	218	326	544
Type I	105	253	323
Total	323	579	902

```
##
## Call:
## glm(formula = cbind(cases, controls) ~ type, family = binomial(link = "logit"),
##      data = df)
##
## Deviance Residuals:
## [1]  0  0
##
## Coefficients:
##              Estimate Std. Error z value Pr(>|z|)
## (Intercept) -0.8794      0.1161  -7.576 3.58e-14 ***
## type         0.4770      0.1454   3.282 0.00103 **
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for binomial family taken to be 1)
##
##    Null deviance: 1.0978e+01  on 1  degrees of freedom
## Residual deviance: 1.4033e-13  on 0  degrees of freedom
## AIC: 16.858
##
## Number of Fisher Scoring iterations: 2
```

4 Diabetes cohort data 2

Below are the same outcomes tabulated by age:

≤ 40	Dead	Censored	Total
Type II	0	15	15
Type I	1	129	130
Total	1	144	145
> 40	Dead	Censored	Total
Type II	218	311	529
Type I	104	124	228
Total	322	435	757

```
##
## Call:
## glm(formula = cbind(dead, censored) ~ type + age, family = binomial(link = "logit"),
##      data = df)
##
## Deviance Residuals:
##      1      2      3      4
## -0.41982  0.09091  0.00776 -0.01168
##
## Coefficients:
##              Estimate Std. Error z value Pr(>|z|)
## (Intercept)  -4.9525     1.0036  -4.935 8.02e-07 ***
## type         -0.1816     0.1595  -1.139  0.255
## age           4.7781     1.0108   4.727 2.28e-06 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for binomial family taken to be 1)
##
##      Null deviance: 133.81237  on 3  degrees of freedom
## Residual deviance:  0.18471  on 1  degrees of freedom
## AIC: 20.745
##
## Number of Fisher Scoring iterations: 5
```