

## The GENMOD Procedure

Model Information	
Data Set	MYDATA.EARINFECTION
Distribution	Poisson
Link Function	Log
Dependent Variable	Infections

Number of Observations Read	287
Number of Observations Used	287

Class Level Information		
Class	Levels	Values
Swimmer	2	Freq Occas
Location	2	Beach NonBeach
Gender	2	Female Male

Criteria For Assessing Goodness Of Fit			
Criterion	DF	Value	Value/DF
Deviance	282	760.0060	2.6951
Scaled Deviance	282	222.4214	0.7887
Pearson Chi-Square	282	963.5838	3.4170
Scaled Pearson X2	282	282.0000	1.0000
Log Likelihood		-68.9544	
Full Log Likelihood		-566.2004	
AIC (smaller is better)		1142.4008	
AICC (smaller is better)		1142.6143	
BIC (smaller is better)		1160.6982	

Algorithm converged.

Analysis Of Maximum Likelihood Parameter Estimates								
Parameter		DF	Estimate	Standard Error	Wald 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept		1	1.3292	0.4652	0.4175	2.2410	8.16	0.0043
Swimmer	Freq	1	-0.6086	0.1941	-0.9891	-0.2281	9.83	0.0017
Swimmer	Occas	0	0.0000	0.0000	0.0000	0.0000	.	.
Location	Beach	1	-0.4896	0.1938	-0.8694	-0.1098	6.38	0.0115
Location	NonBeach	0	0.0000	0.0000	0.0000	0.0000	.	.
Age		1	-0.0261	0.0226	-0.0703	0.0182	1.33	0.2487
Gender	Female	1	0.0294	0.2018	-0.3661	0.4249	0.02	0.8842

Analysis Of Maximum Likelihood Parameter Estimates								
Parameter		DF	Estimate	Standard Error	Wald 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Gender	Male	0	0.0000	0.0000	0.0000	0.0000	.	.
Scale		0	1.8485	0.0000	1.8485	1.8485		

**Note:** The scale parameter was estimated by the square root of Pearson's Chi-Square/DOF.

LR Statistics For Type 3 Analysis						
Source	Num DF	Den DF	F Value	Pr > F	Chi-Square	Pr > ChiSq
Swimmer	1	282	10.29	0.0015	10.29	0.0013
Location	1	282	6.54	0.0111	6.54	0.0105
Age	1	282	1.36	0.2448	1.36	0.2438
Gender	1	282	0.02	0.8845	0.02	0.8844