

## **Probability Density for the Normal and Gamma Distributions**

$$f(y | \mu, \sigma^2) = \frac{1}{\sqrt{2\pi}\sigma} \cdot e^{-\frac{(y-\mu)^2}{(2\sigma^2)}},$$

The probability density for the normal distribution is

where  $\mu$  and  $\sigma$  are the location and scale parameters, respectively, in PROC GENMOD.

$$f(y|\nu,\mu) = \frac{1}{\Gamma(\nu)\cdot y} \cdot \left(\frac{y\nu}{\mu}\right)^{\nu} \cdot e^{-\left(\frac{y\nu}{\mu}\right)},$$

The probability density for the gamma distribution is

where  $\mu$  and  $\nu$  are the location and scale parameters, respectively, for PROC GENMOD.

Close

Copyright © 2017 SAS Institute Inc., Cary, NC, USA. All rights reserved.