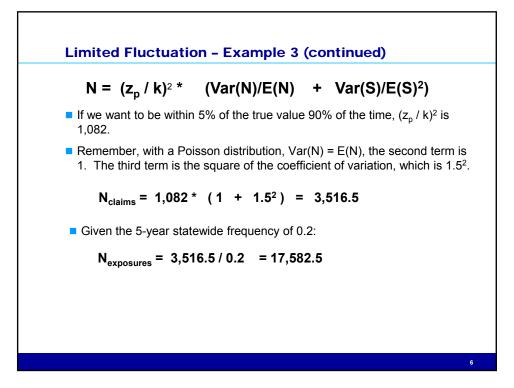


## **Limited Fluctuation - Example 3**

Given a current territory factor of 1.08, determine the indicated territory factor with 5 years of data. The frequency distribution is Poisson and the severity coefficient of variation of 1.5. Use the square root rule and the limited fluctuation formula for pure premium. Assume that you want to be within 5% of the true value 90% of the time. The statewide frequency is 0.20 and fixed expenses are 15%.

Year	Territory <u>Exposure</u>	Territory <u>Claim Count</u>	Territory <u>Loss Ratio</u>	Statewide <u>Loss Ratio</u>	
2006	3,000	330	125%	78%	
2007	3,020	420	153%	83%	
2008	3,030	630	269%	85%	
2009	3,020	210	122%	79%	
2010	3,050	190	108%	72%	
'06-'10	15,120	1,780	162%	80%	
					5



	Territory	Territory	Exposure	Claim
<u>Year</u>	<u>Exposure</u>	Claim Count	<u>Credibility</u>	Credibility
2006	3,000	330	41.3%	30.6%
2007	3,020	420	41.4%	34.6%
2008	3,030	630	41.5%	42.3%
2009	3,020	210	41.4%	24.4%
2010	3,050	190	41.6%	23.2%
'06-'10	15,120	1,780	92.7%	71.1%

