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What is Funding Confidence Level and Why it Matters to Public Risk Pool Members?

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Each year public risk pools determine current-year funding and also evaluate if the prior year's loss reserve provision is adequate. To determine adequacy of reserves pools consider confidence levels, discount rates[1] and unallocated loss adjustment expenses[2], usually developed by outside actuaries and accountants. Members of public risk pools often ask: how does one determine the proper amount of capital and surplus needed to absorb unexpected losses for a given risk pool. How much is enough capital to set aside for reserves?

A confidence level analysis is used by actuaries to determine the realistic possibilities that a given funding rate for cash reserves will be enough to pay all claims that might happen in any one program year. Here is a comparison of the impact of various confidence levels:

Claims Reserves Funding Confidence %	Number total years	Number years when funding shortfalls for claims happen	Funding Adequacy Determination
55%	100	45	Inadequate
70%	100	30	Marginally Adequate
95%	100	5	Conservative

Public risk pools relying on funding at a 70% (or lower) confidence level are exposed to the possibility of assessing its members or raising premiums to cover the shortfall in 3 out of every ten years. For public entities on fixed budgets this lack of certainty can be unsettling.

Insurance pools retain actuaries to determine their member assessments or premiums for the current year and also to determine the adequacy of reserves set aside to cover claims from prior years.

[1] Discount level is another term for interest rate. Specifically, a discount rate is the assumed interest rate that money invested today will earn over time. It can be used to determine how much money needs to be invested today to reach a target amount in the future.

[2] Unallocated loss adjustment expenses refer to those expenses incurred that cannot be readily identified to a specific claim or file. The single biggest component of unallocated loss adjustment expenses is claims administrative fees.

A confidence level measures the probability that a given level of funding will be sufficient to pay all losses and corresponding claims expenses. When assessing claims funding levels, members may not take into account large liability losses (e.g., employment practices liability claims, which are infrequent and possibly severe when they happen.) These large claims can cost $250,000 to $2.0 million and must be accounted for when reserving for claims. Expected losses do not include provision for every adverse outcome of incurred losses.

If Pools Expected Losses in given year are	**Confidence level to pay Actual Incurred Losses**	**Claims Reserves Funding required for Confidence Level**
$ 1.0 million	95%	$2.11 Million
$1.0 million	70%	$1.56 Million
	Difference in Reserves	**$550,000**

In this instance, the 70% funding confidence level has a $550,000 difference in reserves from the 95% confidence level. Since we don't know what the final outcome of the actual claims experience will be for any claim period that has open claims, pool management should recognize that 30% of the years (30 out of 100 years) each Pool member may be assessed or pay extra premium to make up the shortfall when severe claims deplete reserves. If a Pool had reserved at the 95% confidence funding level then members only have a 5% chance (5 out of 100 years) that they might be assessed or required to pay extra premiums to make up for claims reserve shortfalls. Which scenario would you want to be a part of?

Confidence levels are a helpful tool for answering these questions:

- "How financially strong is our present risk pool?" and
- "How strong are prospective risk pools we are considering?"

As fallible people we cannot be certain in our prediction of future outcomes. In spite of our best risk mitigation efforts members in public risk pools can have infrequent but severe claims that substantially dip into a public risk pool's financial reserves.

Public managers and elected officials selecting Pools with 70% or lower confidence levels should recognize that severe reserve draining claims can happen and subsequently will require an increase in premiums or member assessments to replenish reserves. These unplanned increases in insurance expenses will strain operating budgets of the Pool's public entity members.

Consequently, public entities, that participate in risk pools that are managed properly and fund insurance costs prudently, often benefit from lower long-term costs of insurance as well as increasing the predictability of the insurance costs each year.