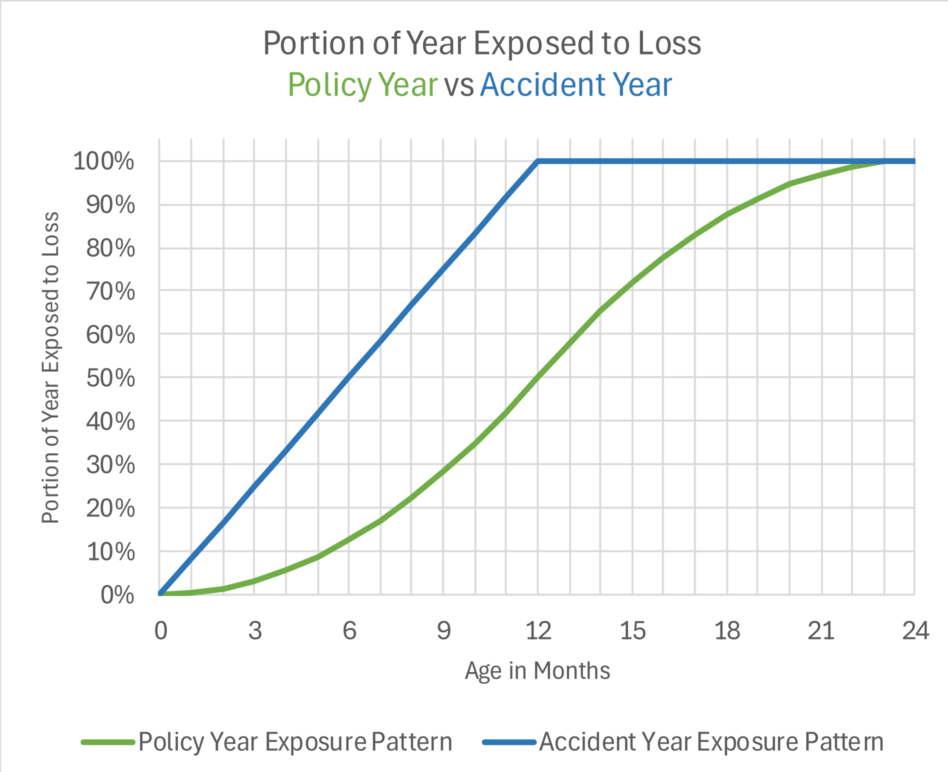
Exposure Adjustment
for Policy Year Loss Development Factors



LDFs for policy years require special consideration between ages 0 and 24 months. Whereas exposure for an accident year reaches 100% after 12 months, a policy year requires 24 months to be fully exposed*.

Exposure adjustments are necessary in many instances, including interpolation.

**Note: this assumes that a series of 12-month policies with equal premium is written and earned uniformly over time.*

Special Considerations for Incomplete PY's or AY's

#1: Consider need for exposure adjustments for incomplete PY's or AY's
#2: Adjustments are necessary when interpolating incomplete PY's

How to Interpolate Policy Year LDFs

Step 1: Using PY Percent of Ultimates, remove exposure growth
Step 2: Interpolate the PY Percent of Ultimates (w/o exposure growth)
Step 3: Reintroduce exposure growth to PY Percent of Ultimates

When to Apply Policy Year LDFs with or without Exposure Growth

A PY LDF with exposure growth is used to develop estimates of ultimate loss for entire policy years, even for incomplete policy years (i.e., less than 24 months of age). Use LDFs with exposure growth to develop an incomplete PY to its ultimate value that reflects the full 24 months of exposure.

A PY LDF without exposure growth is used to develop estimates of ultimate loss for partial policy years at age *t*. These estimates will not reflect ultimate loss related to exposure beyond age *t*. Use LDFs without exposure growth to develop an incomplete PY to its ultimate value that reflects only the exposure earned through time *t*.

A sample Excel worksheet is available at https://archeractuarial.com/tools/