

Logistic Regression Interpretation Checklist

Turn logistic-regression output into a precise and defensible explanation.

Model definition

- ☐ State which outcome category is modeled and define the analysis population.
- ☐ Name every reference category, unit change, transformation, interaction, and nonlinear term.
- ☐ Distinguish unadjusted from adjusted estimates and describe the covariate-selection rationale.

Interpretation record

Predictor or contrast	OR	95% CI	Plain-language interpretation

Model quality

- ☐ Check sparse cells, separation, influential observations, and multicollinearity.
- ☐ Assess functional form for continuous predictors rather than assuming linearity in the log odds.
- ☐ Evaluate discrimination and calibration when prediction is a goal.
- ☐ Use an appropriate internal or external validation design for performance claims.

Reporting

- ☐ Report odds ratios with confidence intervals and avoid describing them as risk ratios.
- ☐ Use predicted probabilities or marginal effects when they communicate practical impact more clearly.
- ☐ Keep causal language consistent with the design, adjustment set, and assumptions.

Use this resource with the related DataStatPro guide. Adapt every decision to the approved protocol, data structure, and destination requirements.