

Premier League Implied Probability Model

January 25, 2026

Win Probability & Odds Conversion

TOP FAVORITE

Liverpool

IMPLIED WIN PROB

59.0%

DECIMAL ODDS

1.70

TEAMS ANALYZED

5

Win Probability Rankings

Team	Record	Win %	Implied Prob	Decimal Odds	American Odds
Liverpool	25-4	65.8%	59.0%	1.70	-144
Manchester City	21-9	55.3%	50.6%	1.98	-103
Arsenal	20-4	52.6%	48.5%	2.06	+106
Chelsea	20-9	52.6%	48.5%	2.06	+106
Newcastle United	20-12	52.6%	48.5%	2.06	+106

Odds Conversion Reference

Implied Probability	Decimal Odds	American Odds	Interpretation
80%	1.25	-400	Heavy favorite

66%	1.50	-200	Clear favorite
50%	2.00	+100	Even money (coin flip)
33%	3.00	+200	Underdog
20%	5.00	+400	Long shot

Model Insights:

- Implied probabilities derived from season record with Bayesian smoothing
- Top team (Liverpool) has 59.0% implied win probability
- Value opportunities exist when market odds diverge from implied probabilities

Methodology: Win probability = $(\text{Wins} \times \text{Games} + \text{Prior} \times 10) / (\text{Games} + 10)$. Prior of 33% used for regression to mean. American odds: favorite = $-100 \times p / (1-p)$, underdog = $100 \times (1-p) / p$. Decimal odds = $1 / \text{probability}$. Data from TheSportsDB current season standings.