

Interobserver and Intraobserver Variability Calculations

Interobserver and intraobserver variability in coding was assessed using the Kappa statistic test. The Kappa statistic is calculated as:

$$\kappa = \frac{P(A) - P(E)}{1 - P(E)}$$

where P(A) is the proportion of times in which the observers agreed and P(E) is the proportion of agreement expected by random chance alone.³⁷⁵ For the interobserver variability analysis, which was conducted by three coders, each data point generated three pairings (coders A and B, A and C, B and C). Kappa statistics of 0.8 and higher were considered to reflect a strong level of agreement, while statistics from 0.6 to 0.79 were considered to reflect a moderate level of agreement, and statistics from 0.4 to 0.59 were considered to reflect a weak level of agreement.³⁷⁶

1. Interobserver Variability

A maximum of 249 observations were possible for each variable, based on single observations by three observers in eighty-three cases. Because of missing data points, typically when one or more observers did not enter a coded value, the number of observations is often less than 249.

Data Point (Possible Responses)	Kappa Statistic	Number of Observations	Strength of Agreement
Decision Within MDL/Class Action/Consolidated (MDL, Class Action, Consolidated, No)	.96	245	Strong

375. See Mary L. McHugh, *Interrater Reliability: The Kappa Statistic*, 22 *BIOCHEMIA MEDICA* 276, 280 (2012).

376. *Id.* at 279 tbl. 3.

Case Was Ever Part of MDL/Class Action/Consolidated (Yes, No)	.84	245	Strong
Procedural Posture (Pleading, Motion for Summary Judgment, Post-Trial, Other)	.92	249	Strong
Outcome of Strict Liability Design Defect Claim (Survived, Failed, No SL Design Defect Claim)	.72	239	Moderate
Blanket Application (Yes, No)	.66	174	Moderate
Categorical (Yes, No)	.61	212	Moderate
Case-by-Case (Yes, No)	.54	191	Weak
Does-Not-Apply (Yes, No)	.91	175	Strong
Cannot Be Determined (Yes, No)	.47	191	Weak
Broad Application (Blanket or Categorical) or Narrow Application (Case-by-Case or Does-Not-Apply)	.73	191	Moderate
Comment k Applies Only if Properly Prepared (Yes, No, Cannot Be Determined)	.43	241	Weak
Applies Only if Adequate Warning Provided (Yes, No, Cannot Be Determined)	.43	241	Weak
Applies Only if Cannot Be Made More Safe (Yes, No, Cannot Be Determined)	.23	237	Minimal
Applies Only if Favorable Risk: Benefit Ratio Demonstrated (Yes, No, Cannot Be Determined)	.33	239	Minimal
Comment k Bars/Could Bar SL Manufacturing Defect (Yes, No, Cannot Be Determined)	.52	248	Weak
Comment k Bars/Could Bar SL Failure to Warn	.49	245	Weak
Bars/Could Bar All Forms of SL (Yes, No, Cannot Be Determined)	.52	247	Weak

Bars Warranty Claims (Yes, No, Cannot Be Determined)	.74	243	Moderate
Bars Other Claims, e.g., Negligence (Yes, No, Cannot Be Determined)	.91	243	Strong

2. Intraobserver Variability

The author initially coded the available cases in October-November 2021. The cases were recoded by the author and two research assistants in 2023-2024. In total, the author coded 180 cases twice, allowing for an assessment of intraobserver variability at an interval of two years.

Data Point (Possible Responses)	Kappa Statistic	Number of Observations	Strength of Agreement
Decision Within or Ever Part of MDL/Class Action/Consolidated	.94	180	Strong
Procedural Posture: Pleading, MSJ, Post-Trial, Other	.95	180	Strong
Outcome of SL Design Defect Claim: Survived, Failed, No SL Design Defect Claim	.83	180	Strong
Blanket Application (Yes, No)	.82	163	Strong
Categorical: Yes, No	.41	160	Weak
Case-by-Case: Yes, No	.75	145	Moderate
Does-Not-Apply: (Yes, No)	.96	142	Strong
Cannot Be Determined (Yes, No)	.56	166	Moderate
Broad Application (Blanket or Categorical) or Narrow Application (Case-By-Case or Does-Not-Apply)	.64	162	Moderate
Comment k Applies Only if Properly Prepared (Yes, No/Unstated)	.71	180	Moderate
Applies Only if Adequate Warning Provided (Yes, No/Unstated)	.68	180	Moderate
Applies Only if Cannot Be Made More Safe (Yes, No/Unstated)	.78	180	Moderate

Applies Only if Favorable Risk: Benefit Ratio Demonstrated (Yes, No/Unstated)	.71	180	Moderate
Comment k Bars/Could Bar SL Manufacturing Defect (Yes, No/Unstated)	.89	180	Strong
Comment k Bars/Could Bar SL Failure to Warn (Yes, No/Unstated)	.76	180	Moderate
Bars/Could Bar All Forms of SL (Yes, No/Unstated)	.90	180	Strong
Bars Warranty Claims (Yes, No/Unstated)	.89	180	Strong