Testing Regulatory Signage to Nudge Safe Chairlift Behaviour at BC Ski Hills

BIG Difference BC Conference

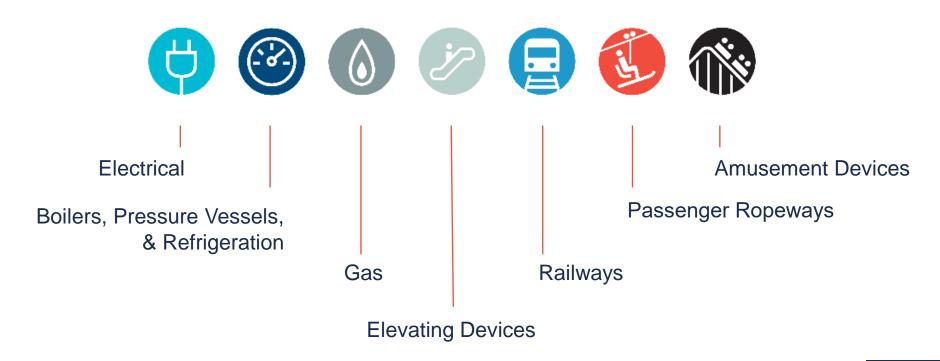
Nov 3, 2023





Who We Are

Technical Safety BC is an independent, self-funded organization that oversees the safe installation and operation of technical systems and equipment across the province.

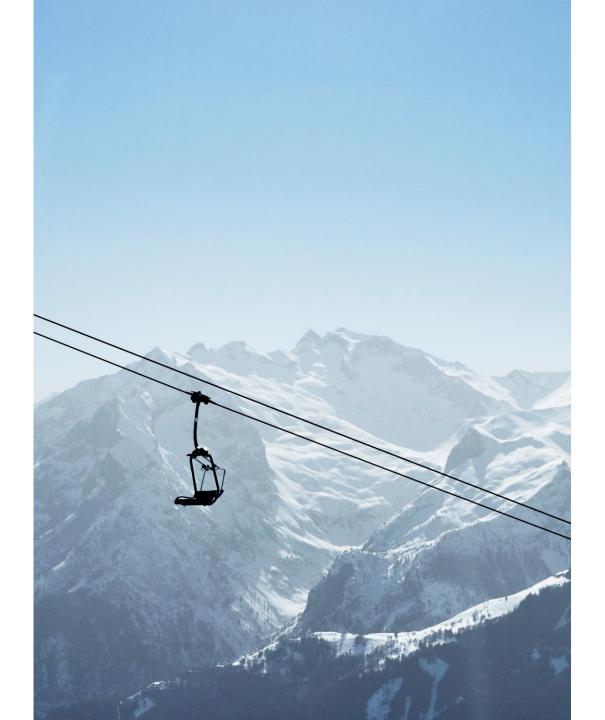




Background

- Falling from chairlifts is a safety risk in BC
- Falls are primarily caused by passenger behaviour
- Conducted exploratory research in 2022
- Opportunity: "nudge" safe chairlift behaviour
- Conducted data collection & signage pilot in 2022/2023 season





Method

- Partnered with 7 ski hills in BC
- Observational data collection during load & unload
- n=5,400 observations
- Tested salient regulatory signage



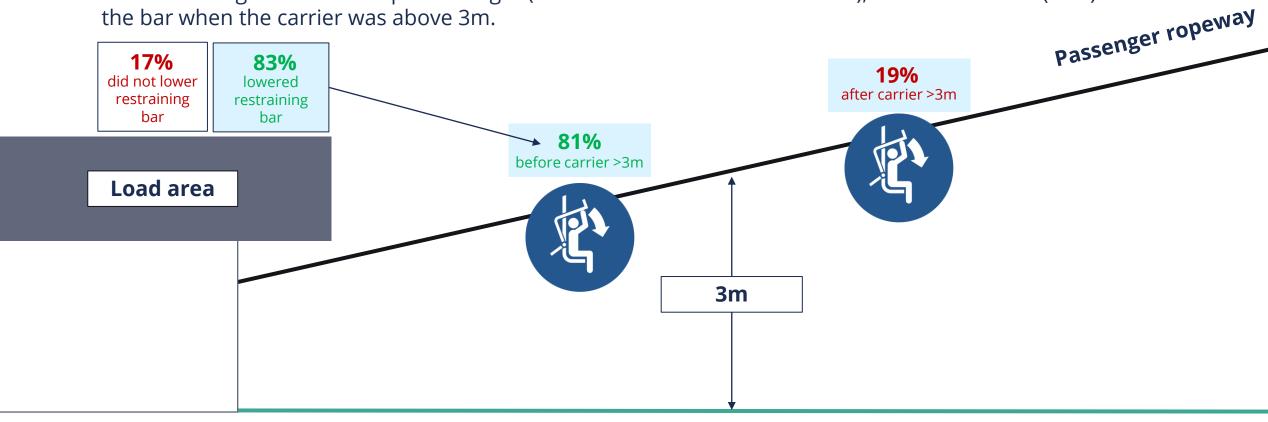






Restraining bar behaviour – Load

Eight-in-ten (83%) riders lowered the restraining bar during loading. Among them, eight-in-ten (81%) lowered the restraining bar at an acceptable height (before the carrier was above 3m), while one-in-five (19%) lowered the bar when the carrier was above 3m.

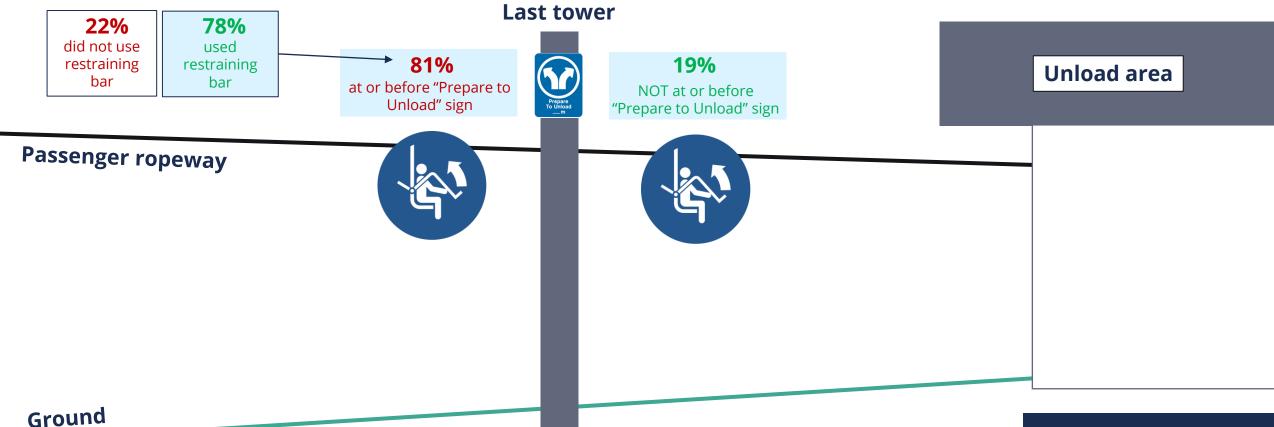


Ground



Restraining bar behaviour – Unload

During unloading, just under eight-in-ten (78%) riders were using the restraining bar. Among them, most (81%) raised the restraining bar at an **unacceptable time** (at or before the "Prepare to unload" sign), while only 19% raised the bar at an acceptable time.



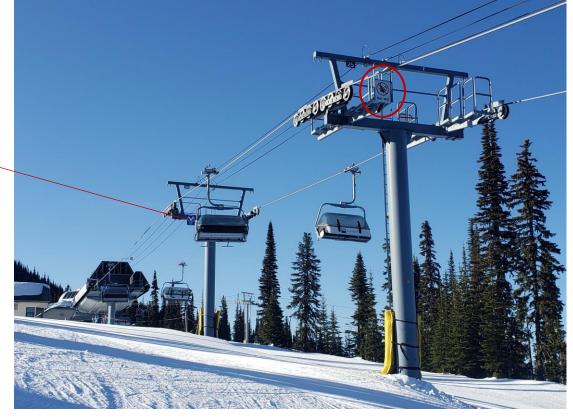


Signage: "Not Yet"

Hypothesis: Passengers raise the restraining bar too early when unloading. The "Not Yet" sign was installed before the "Prepare to unload" sign to discourage raising the bar too early.

Already on the last tower:





Sun Peaks (Sunburst)



Installed on the second-last tower:

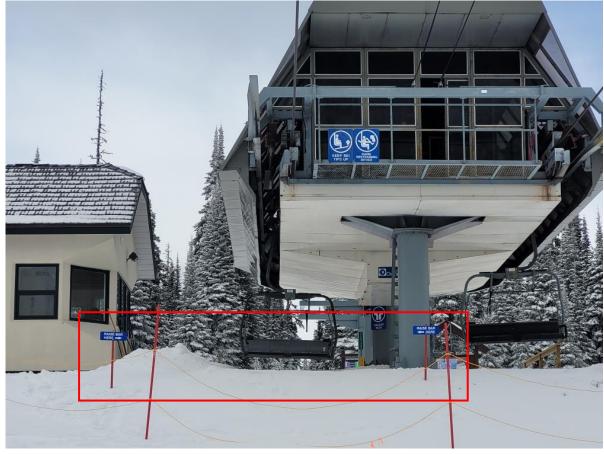


Sun Peaks (Sundance)



Signage: "Raise Bar Here"

Hypothesis: Passengers raise the restraining bar too early when unloading. The "Raise bar here" signs were installed at the unloading area to encourage proper restraining bar usage.



Positioned at the unloading zone:



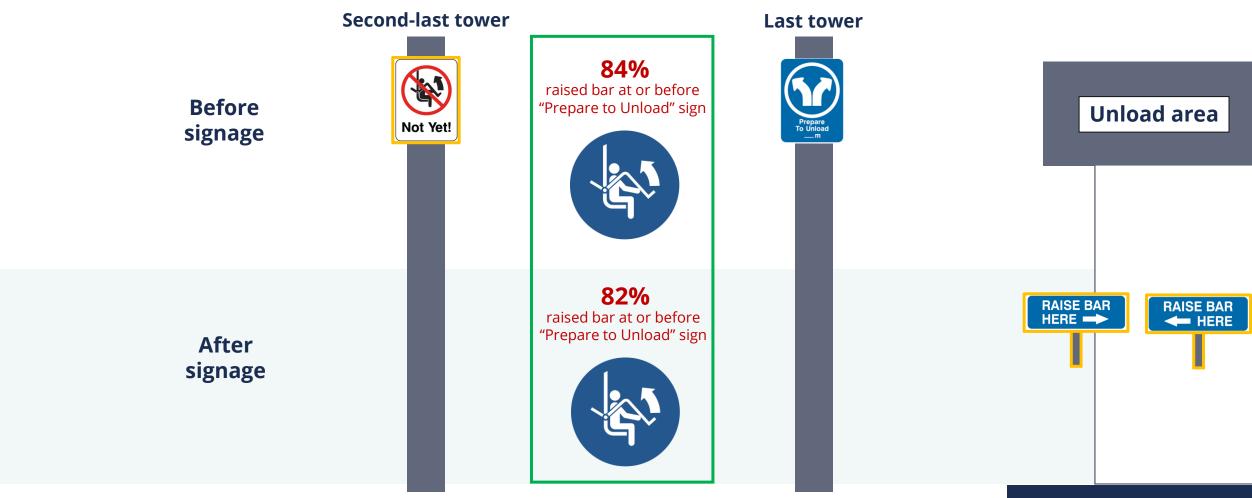


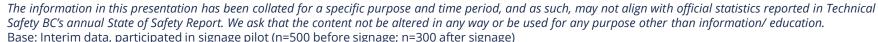


Sun Peaks

Signage pilot (total) – Restraining bar behaviour (Unload)

Signage placement at the unloading area has appeared to marginally decrease the proportion that raise the bar early (82% with signs vs. 84% without signs); however, this difference is not statistically significant.





Base: Interim data, participated in signage pilot, restraining bar in use during unloading (n=383 before signage; n=217 after signage)



Learnings & takeaways



Behavioural issues are complex



Piloting and testing is beneficial



Industry partners and internal champions are crucial



Thank You

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