

Incident Summary #II-1919912-2025 (#57774) (FINAL)

Incident Date		May 31, 2025	
Location		Port Hardy	
Regulated industry sector		Amusement Devices - Amusement ride	
Impact	Injury	Qty injuries	1
		Injury description	A person reported sustaining broken bones.
		Injury rating	Moderate
	Damage	Damage description	N/A
		Damage rating	None
Incident rating		Moderate	
Incident overview		While unloading an amusement ride, a passenger carrying unit (PCU) was activated and moved upwards from the landing platform by the ride-operator before the second of two passengers had exited and the door was still wide-open. When the PCU was approximately 6-8 feet above the ground the remaining occupant fell out the open door to the ground resulting in several injuries.	
Site, system and components		TRAVELLING AMUSEMENTS	
		Typically, portable amusement rides are set up at community events, annual fairs or carnivals for the public in large empty lots or parks by licensed amusement companies. The operators and staff of these companies travel together around large geographical areas from around April until September as a group and can include employees that are family members and some long-term, experienced employees who return for the summer season of work after their winter breaks.	
		Ownership	
		The amusement company operation has been in service since 2020 under the current ownership. Prior to that, and starting in 2017, the current owner was employed as the General Manager of the company. The owner's total experience in the industry exceeds 44 years. There are approximately 36 employees with this company of varying ages and experience levels.	
		The Zipper Ride (Image 1)	
		The feature ride for the company is the "Zipper." The Zipper is an amusement ride that has been in use around the world since the 1960's and is manufactured by Chance Rides based out of Wichita, Kansas. It consists of a boom typically with twelve compartments (cars) attached. Each car can seat two adults or children over 52 inches tall with a maximum combined weight of 340lbs per car. The boom rotates all of the twelve cars simultaneously, each car will then individually rotate, creating a swinging and rolling motion. This specific zipper ride was manufactured in 1973.	
		The doors for the PCU (Image 2) of the cars are hinged on one side to enter and exit when the cars are brought to the ground-level. Lap bars are attached to the doors. When the	

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doors are closed by attendants; the padded lap bar comes down across the laps of the riders.

When the doors are opened, the lap bar swings away from the rider eliminating any protective barrier and making it possible for the rider to fall out of the car.

Latching systems hold the doors closed with redundancy in mind. The PCU has the Lap-Bar Latch, Safety knob and Spring-Bar Latch which require multiple actions to open the doors ([Image 3](#)).

Loading and unloading is done in a way to keep the ride balanced and the line of patrons moving through the process. Often, during busy times, two cars are loaded and unloaded at the same time by two separate attendants. This is allowed according to the manufacturer's manual.

Control for the Zipper Ride ([Image 5](#))

The control podium houses all the controls needed for operating the zipper ride and is located on the loading platform adjacent to the ride. There are two toggle switches for operating the hydraulic pump and the lights respectively. These would typically remain on throughout the operating period. The ride controls will not move the ride if the pump is off. Once the pump is turned on the ride has two independent rotations. The left-hand, red coloured controls will move the boom in the clockwise or counterclockwise directions. The right-hand, green controls will move the cars around the boom, with the boom stationary. For both movements, the top controls will move the ride counterclockwise (CCW) and the bottom will move the cars clockwise (CW).

A large RED "EMERG STOP" button is raised in the centre bottom.

Depressing any single green or red button will activate the ride movement with a single action. The buttons have to be held down to continue operation. If the operator stops depressing the buttons the ride will automatically stop moving.

Failure scenario(s)

Setting

The travelling amusement company was set up in the incident location for a three-day community event/carnival setting where rides are set up and operated for the public's enjoyment.

The rides are operated by employees who travel and live in a community for a seasonal period usually in the warmer months March to October all around the province. After a winter break the employees come back to work and immediately start working on the ride maintenance, set-up, operations and other amusements like game stations etc.

The popular Zipper ride that was involved in the incident is considered by employees to be one of the busiest and more advanced rides for operators to control and is run by the more experienced employees in a team from two to four people depending on how busy the ride is.

Prior to the Incident

On the day of the incident, two patrons were self-described as intoxicated from alcohol. They were intoxicated but loaded onto the zipper ride multiple times before the final incident-ride and had several items with them including a bottle of alcohol.

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Time of the incident - Loading

The two patrons were loaded into the PCU by two experienced operators and one younger attendant who was the child of the Foreman of the Zipper ride and had been helping and was described as “really good at cracking buckets”. (An industry term for loading and unloading a caged style ride). The younger attendant had been trained in the specific procedures of loading and unloading the PCU but did not have the experience or assertiveness necessary to deal with situations that deviated from the normal routine.

The Foreman had left the area for a brief time after repairing a component to wash up. The younger attendant, who travels with the carnival, was left around the Zipper ride where they were helping the loading and unloading of passengers, which they had done several times previously at different fair locations.

Neither attendant was able to intervene or prevent loading of intoxicated passengers despite the posted rules and manufacturer and code requirements indicating intoxicated riders were not allowed. The younger attendant later described the rider as “half asleep and half awake.”

At the time of the incident, the ride was very busy, and the attendants were “double loading” (i.e. loading two PCU’s simultaneously), a common and recognized practice in both the operation and manufacturer’s manuals.

It was common practice to not “disallow” intoxicated patrons to ride to prevent conflict between patrons and attendants. The younger attendant did not feel confident in enforcing the must-not policies around preventing ineligible people in certain conditions from entering the ride and there was no policy found around selling tickets to persons who may be ineligible to ride the Zipper specifically.

Time of the incident - Unloading

The ride was loaded, activated normally and completed the ride cycle.

The attendants began unloading the ride. The older attendant completed unloading and reloading of the PCU that they were responsible for. The intoxicated patrons were in the PCU that stopped where the younger attendant was and when the attendant opened the door, only one rider stepped out. The second person was taking much longer than normal to exit the ride. There was no interlock between the restraints and activation of the ride, nor was there one required at the time this ride was built.

Activation and Injury

The older attendant working on the other PCU signalled to the control operator that their carrying unit was ready with a facial cue or head-nod as no standard or verbal confirmations are typically exchanged in this role. At the time of the incident, there was no communication from the younger attendant to the ride operator to tell them that the patron was taking longer than usual.

The control panel for the Zipper ride required one, single action button for activation and had no secondary or redundant switch to prevent an inadvertent operation.

The operator activated the ride by pressing an activation button to move the next cars into unloading/loading position and holding it for two to three seconds. The operator did not check that the second carrying unit was fully unloaded and that the attendant was clear from the area before activating the ride.

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The Result

The PCU rose approximately 6-8 feet as it would have with the door and lap bar in place. However, in this case, with the door opened, the weight of the door tilted the PCU forward and ejected the unsecured rider onto the ground below.

The rider partially landed on and off the metal platform and the ground. People administered first-aid and the patron was taken to the hospital by ambulance.

Testing

Testing by investigators confirmed the activation button would have to be depressed for approximately 2.5 seconds for PCU to travel from unloading position to lifted position of 6-8 ft where the patron fell out.

Zipper Ride Manual

Requirement Of Verbal Safety Announcements

"All safety announcements given to passengers as they load should include, but not limited to the following:

1. no single riders.
2. secure all loose articles.
3. to properly ride this ride.

All passengers must hold onto the grab bars on the inside of the ride door, with both hands when the ride is in motion space in addition to the above safety announcement items, no person who is pregnant, visibly ill, or under the influence of drugs or alcohol must be permitted to ride."

The owner reported the incident the same day.

Requirement of Duty Holder to Report: [Bulletin: NO: IB-AM 2017-01 REV.01](#)

Safety Standards Act

Elevating Devices Safety Regulation- Definitions

- **"operator"** means a person who (a)has direct control over the starting, stopping or speed of an amusement ride or part of the ride, or (b)is in charge of the entire operation of an amusement ride.
- **"attendant"** means an individual involved in marshalling passengers, cars or carriers, in assisting or instructing patrons or in other safety related operating duties.

CSA Z267-00 (Current adopted code)

Operational Requirements Apply

7.5.1 Manufacturer's Instructions

Each owner/operator of an amusement ride or device shall read and become familiar with the contents of the manufacturer's maintenance instructions and specifications when received.

8.2 Owner/Operator's Responsibility

8.2.4 Patron Safety

Facts and evidence

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8.2.4.1 Denial of Entry

The owner/operator of an amusement ride or device shall deny entry to the ride or device to any person, if in the opinion of the owner/operator the entry may cause above-normal exposure to risk of discomfort or injury to the person who desires to enter, or jeopardize the safety of other patrons or employees.

8.2.4.2 Guidelines on Special Considerations Ride or device operators should be given guidelines by the owner/operator on the special considerations concerning patron size, and the special considerations applicable to physically disabled and mentally impaired patrons, related to their particular ride or device.

INTERVIEWS

Attendant #1: Responsible for ride loading/unloading at time of incident:

- Approximately four years experience working directly around the zipper ride but has been in the environment and mentored for many more years.
- Did not witness the fall as their back was turned but present before, during and after.
- States both the injured party and the person riding were “hammered”, and an alcohol bottle was present in the compartment after the ride.
- No training to identify or deny riders with medical or substance barriers that would make them ineligible to ride.
- Never had to fill a statement or incident form but has witnessed things that were reported verbally to the owner.
- No refresher training when returning from winter breaks is officially required but does familiarize themselves with ride features.
- No understanding of responsibilities related to Safety Standards Act (SSA) or Regulations.
- No formal training after getting signed off when hired. Only mentorship of more experienced staff and foreman.
- No formal procedure exists or standard communication about when to start the ride. The operator just visually watched and used visual cues to determine when it was ready to move.
- There was one operator and two attendants at the time of the incident.

Attendant #2 – Nine-year-old Child of Foreman - (Responsible for ride loading and unloading at the time of the incident):

- No training just knows from watching and learning.
- Described the customer as “half asleep and half awake” when they opened the door, the customer didn’t get out.
- Knows there is no eating or drinking allowed on the ride.
- Witness of the fall.
- Was still close to the ride as it lifted with the passenger and door open, thought they were close enough to touch it.
- “I yelled ‘next’ and the ride moved.”
- Saw a bottle of alcohol and vape present in ride compartment.

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Person #3 - Zipper Controls Operator (Responsible for ride activation and controls at the time of incident. Located at control panel facing PCU's loading and unloading):

- 4-5 years experience. Parent also works at the amusement company.
- Took longer for the patrons to exit PCU than normally expected.
- At time of incident was at the controls. Saw both doors open.
- (The switch is an activation switch which moves the PCU) "slipped a little bit, held it until they saw the lady fall".
- Was "focused on the bucket in front" and "when I saw [them] put in the clip in that's when it happened".
- Was not aware of what was happening with the other carrier. Guessed finger had depressed the button for 2-2.5 seconds, carrier raised 5 or 6 feet.
- No refresher training officially required but does familiarize themselves with ride features on a seasonal basis.
- No understanding of Safety Standards Act or Elevating Devices Safety Regulation.
- No formal training. Only mentorship since original signoff when originally hired.
- No training to identify or deny riders with medical or substance barriers that would be ineligible to ride.
- Three of them at the Zipper at the time of the incident. One operator, and two attendants doing loading and unloading.
- Foreman had just gone to wash up and left their child at ride to help "bucket crack."

Owner:

- Came to the scene and saw PCU up in the air about seven feet door open and a person on the ground. Activated staff to guide ambulance in park.
- Made sure ride closed.
- Stated the youngest person involved with loading, was not supposed to be doing any work around the ride and as the owner they stated they were unaware that was happening.
- Understands ride rules and regulations.
- Is also the (Electrical) FSR for the company.
- Has a training manual that is being updated.

Foreman/Father:

- Has been Foreman of the Zipper for four years but in the business for 30 years.
- 20+ years with Zipper ride maintenance and operations for various outfits.
- Left to wash up when incident happened.
- Operator were on site, stated by Attendant #1.
- Attendant #2 was also at ride location when they left to wash up. Attendant #2 was opening the doors, and it was not his first time doing that.
- Attendant #2 been with him for two years there. Attendant #2 really likes that ride and is really "good at cracking buckets".
- As a controller, the hands and fingers are always in the ready position.
- If line up is long there is usually three people working the ride.
- Attendants load and unload the ride if the doors not closed then the operators know not to start the ride until the attendants are standing off to the side they are done with the bucket.
- Responsibility of the ride is the operator at the controls.
- After hiring, they sign sheets for training that define procedures for responsibility.

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- No refresher or seasonal training after winter break.
- Attendants and operators are shadowed. Not much defined in terms of training protocols.
- Zipper is a more complex ride, and expectations are higher for operators
- Feels existing protocols and training are good but thinks refreshers would be good and also spring-loaded buttons would be good.
- “Finger slip makes sense, I’ve done it, other people have done it”
- Patrons appeared intoxicated. Smelled of alcohol. Bottle of alcohol in the bucket.
- Some patrons are more intoxicated than others. Can be a common problem.
- Rules are clearly stated on the sign.
- The child explained to their mother and the RCMP that when they were loading the lady was taking forever to get out.
- The father felt that this should not have caused a mix up, since verbal cues are not typically used for activation of the ride by the operator.
- Control operator has a clear view in front of the ride PCU and doors.

Other Statements

- Injured party had been removed from premise the day before.
- Injured party appeared intoxicated after accident.
- Younger ride attendant present and gave witness statement to RCMP after incident.
- Cousin was on ride with injured person and exited safely but smelled of alcohol and appeared intoxicated.
- These events attract a lot of intoxicated young people.

Training Manual – Amusement Company Policy

- Ensure you understand and know the rules of this ride as shown on the sign ([Image 4](#)).
- Persons with mental or physical impairment are not allowed to use this ride.
- Each time you operate the ride, always visually check that the operating area is clear of all obstructions each time you turn the ride, both on the ground such as fence line .
- The operator must remain in full control of the operating controls at all times during the operation of the ride.
- The ride and its passengers must be given the full attention of the operator. Never leave the operating console while the ride is in operation.

Warning sign on ride ([Image 4](#))

- You should not ride if are under the influence of Drugs - alcohol - prescription medication.
- You should not ride if you are unable to stand upright, hold on to the grab bars, or be restrained by the lap bar.

Causes and contributing factors

The cause of the incident was the activation of the ride controls with the PCU door open and an unrestrained patron still inside. This resulted in the passenger being ejected to the ground from approximately 6-8 feet in the air.

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Contributing Factors:

Operation Procedure and Practices:

1. There was no official procedure or policy for attendants loading and unloading the two carriers simultaneously to ensure restraints in both carriers were closed and locked before the operator activated the ride.
2. There were no defined communication requirements between attendants and operators to confirm the ride was in a safe condition with restraints in place before activation.
3. The operators typically remain in constant contact with the activation controls even when doors and restraints are open increasing the likelihood of unintended ride operation.
4. Attendants have no formal training or procedures in assessing passenger suitability to ride and were uncomfortable in confronting and enforcing posted rules on passengers who appear intoxicated and frequently allow them to ride as opposed to creating a confrontation.
5. The attendant who was given the responsibility for unloading the passenger at the time of the incident did not have the experience and assertiveness required to mitigate or respond to a situation that deviated from the usual routine.

Ride Design and Manufacture:

1. The Zipper ride is an older ride and there was no requirement at the time for an interlock between the restraints and activation of the ride which allowed the ride to move with a patron in the ride and restraints open.
2. The control panel for the Zipper ride required one, single action button for activation and had no secondary, or redundant switch to prevent inadvertent operation.



Image 1 - Zipper Ride.



Image 2 - Hoisted PCU at height of passenger fall.



Image 3 – Door handle and latch on closed PCU door.



Image 4 - Posted warning sign on ride identifying not to ride if under the influence of drugs or alcohol.



Image 5 - Ride operator controls showing typical hand position of the operator on the start and stop buttons for loading and unloading.