



UNITED STATES
CONSUMER PRODUCT SAFETY COMMISSION
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Memorandum

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SUBJECT : Preliminary Analysis of High Chair Restraint System Data

This memo provides a preliminary analysis of incident, injury and death data¹ on high chair restraint systems² as reported in the U.S. Consumer Product Safety Commission's (CPSC) data files. The incident reports referred to in this document not only include injuries and deaths, but incidents in which the potential for injury appeared possible. These data are anecdotal and not a statistical sample of known probability. However, these data do give an indication of the types of restraint incidents occurring with this product and also represent a minimum number of incidents.

Incident Outcome³

During the time period of January 1, 1998 to February 7, 2001, there were 146 reports of incidents involving high chair restraint systems. Table 1 shows a breakdown of the incidents as to outcome.

¹ A search was conducted of the In-depth Investigation file (INDP), Injury and Potential Injury Incident file (IPII), the Death Certificate file (DTHS) and the National Electronic Injury Surveillance System (NEISS) for January 1, 1998 through February 7, 2001.

² For the purposes of this memorandum, a restraint system is defined as any part of the high chair that plays a role in keeping a child confined in the seat. High chairs in restaurants have been excluded from this memorandum since they are often a different design than what is seen for home use.

³ The 146 reports, in some instances, cited multiple incidents or incidents with more than one child in the family associated with a particular hazard. However, the caregiver reporting the problem often did not specify the exact number of times a particular type of restraint event happened, just that it happened multiple times. Hence, the 146 incidents referred to should be thought of as reports although they are referred to as incidents throughout this document. Therefore, the 146 incident reports are truly referring to a minimum number of cases.

Table 1: Reported High Chair Incidents Involving Restraints 1/1/98 to 2/7/01⁴

	TOTAL	146
Deaths		7
Injuries		46
Incidents with No Injury		77
Unknown if Injured		16

Source: INDP, IPII, DTHS and NEISS
U.S. Consumer Product Safety Commission/EPHA

Deaths

The seven deaths associated with high chair restraint systems involved children 9 to 13 months of age. A majority (5) of the decedants were male. The diagnoses in the seven deaths were suffocation (1), strangulation (1), anoxia (1) and asphyxia (4). In the section of this memorandum titled *Hazards*, there is a detailed description of each death as it relates to a specific hazard pattern.

Injuries

The average age of the 46 children injured involving high chair restraint systems was 13 months old. Over half the victims were male (26). Eighty-five percent of the injuries (39) were to the head and face region.

The 46 injury incidents ranged from bumps, bruises and lacerations to several fractures, tooth loss, a mild concussion and a closed head injury. The types of injuries specific to a particular hazard pattern are discussed in the following section titled *Hazards*.

No Injury or Unknown if Injured

To illustrate the scope of the problems with high chair restraint systems as seen in CPSC's data files, non-injury incidents and incidents where an injury was not cited were included in the analysis. There were a number of comments made by consumers that had they not intervened the child may have been injured, such as in a fall scenario. Thus, these incidents, in many instances, could be viewed as near-misses with the potential for injury. For instance, one 9-month-old female had been wiggling out of the restraints of the high chair for three weeks prior to the most serious incident. The child had to be watched constantly because of her ability to get out of the restraints. On the day of the incident the restraint was secured in its tightest position. The parent went to the pantry and came back to find the child hanging upside down over the side of the chair with her feet entangled in the 3-point restraint. In total, there were 93 incident reports that fell into these two categories of no injury or unknown if injured.

⁴ A full description of all 146 reports of incidents with high chair restraint systems is provided in Appendix A, attached to this memorandum.

Hazards

In reviewing the data, a number of hazard patterns⁵ emerged among the 146 incidents as they related to high chair restraint systems. Table 2 shows the breakdown of the incident reports among the hazard patterns.

Table 2: High Chair Restraint System Hazards by Number of Incident Reports 1/1/98 to 2/7/01

	Total	Deaths	Injuries	No Injury	Unknown if Injured
Total	146	7	46	77	16
Tray disengaged or the child disengaged it	36	0	13	21	2
Restraints failed to hold the child	35	0	4	25	6
Restraint system broke	17	0	5	9	3
Restraint straps detached from the high chair	14	0	9	3	2
Tray and restraints failed	9	0	4	5	0
Child slipped down in high chair	9	4	3	2	0
Child could unbuckle restraints	8	0	2	5	1
Hanging	3	1	1	1	0
Restraints disengaged/unbuckled	5	0	0	4	1
Restraints not used	4	0	4	0	0
Entrapment	2	2	0	0	0
Other	4	0	1	2	1

Source: INDP, IPII, DTHS and NEISS
U. S. Consumer Product Safety Commission/EPHA

The following is a detailed discussion of the major hazard patterns associated with the 146 reports of restraint incidents presented in Table 2.

⁵ In over a third of the 146 reports, a fall was mentioned as part of the hazard scenario.

Tray Disengaged or the Child Disengaged It

Thirty-six children were involved in incidents where a tray disengaged from a high chair or the child disengaged the tray. The average age of these children was 13 months. Thirteen children were injured in these types of incidents. Eleven of these injuries were to the head or face region.

Most of the injuries involved lacerations, contusions, or bruises. Additionally, there was a closed head injury, a dental injury, a lacerated neck, and trauma to a lip and knee. Twelve of the thirteen injuries were sustained when the tray came off and the child fell out of the high chair. The thirteenth injury occurred when the child hit the tray and it broke apart from the high chair. The tray hit the child's head, bruising it. In a little less than half (7) of the 15 fall injury incidents, the restraint straps were not utilized.

The high chair trays became detached in a number of ways in these incidents. In most instances the trays fell off the high chair completely. The most common scenarios were:

- The tray was pushed off by the child.
- The child leaned against the tray and it popped off.
- The child could disengage the tray with his feet or knees by hitting, kicking or pushing the locking mechanism.

It was reported that one 14-month-old child had been releasing/unlocking her high chair tray since she was 5-months-old. Some comments were made in the reports concerning factors that may have or did contribute to the failure; among them were:

- The tray was difficult to lock in place or the locking mechanism was not secure.
- The latching device was too close to child's reach.

Restraints failed to hold the child

There were 35 reports (1 report involving twins) of children who were secured in restraint straps that failed to hold them in place. The average age of these children was 12 months with the youngest children being 6 months of age. Four children were injured during such an event, three of which were head injuries. An 18-month-old male had a probable fractured elbow, a 9-month-old sustained a mild concussion, and a 7-month-old and 13-month old male received bumps on their heads. All four injuries occurred during falls.

The following were some common scenarios found in the data, in which the restraint straps failed to hold the child in the high chair.

- Child stood up in the high chair with the safety belt/restraints still on.
- Child leaned forward and almost fell out of straps.
- Child secured in straps could climb/wiggle/slip out of them, resulting in a fall, climbing out of the high chair or standing up.

In these incidents the child was secured in the restraint straps. The child did not disengage the straps by unbuckling the buckle nor did the buckle disengage by itself. In some

cases the tray was in place and in some cases it was not present at the time of the incident. There were a number of observations related to these incidents (either made by the consumer or stated in the report) concerning the restraint systems themselves; among them were:

1. The belt should be adjustable or can't be adjusted to fit properly.
2. The waist strap is positioned too low/should be situated higher.
3. The crotch strap is not adjustable and/or too long.
4. No matter how tightly the child is secured or how close the tray is the child can still get out/stand up.
5. Restraint straps loosen during use or can't be tightened enough.

According to some of the parents, the child's ability to get out of or stand up in the restraints was not an isolated occurrence. One child was reported to have wiggled out of the restraints on a daily basis.

Restraint System Broke

There were 17 reports of restraint systems breaking/failing. The children associated with these reports averaged 16 months of age. Five injuries were reported of which four involved a head or facial injury. The fifth injury was to the child's back. The overall injuries were relatively minor, including a contusion, an abrasion, and bruises and bumps. All five injuries were caused by falls when the restraint system broke.

There were a number of different types of restraint system breakage; they included:

- Broken or cracked restraint bars (the passive restraint) either found in that condition or broken by the child through applying pressure or leaning on it.
- Tray broke off.
- Cracked tray lever not allowing tray to be mounted on the high chair properly.
- Restraint bar (passive restraint) popped off.
- Tray's locking mechanism broke.
- Housing that connects the tray to the high chair broke.
- Strap came out of buckle.
- Seat belt broke off.
- Parts of trays that lock onto high chair broke.
- Support bar beneath tray cracked and prevents the tray from locking.
- Parts of straps' buckles broke.

In the 12 reports where there was no injury or no known injury, it is important to note that in half the incidents the child was in the high chair when the breakage occurred. Hence, the potential for additional injuries was present.

Restraint Straps Detached from the High Chair

There were 14 reports of restraint straps detaching from the high chair. The distinction between this hazard and the restraints actually breaking was that in these cases the restraint was often anchored through a slot in the back of the chair by a clip and the clip pulled through the slot, detaching the restraints.

The average age of the children in these incidents was 13 months. Nine children were injured (bumps, bruises, a hematoma and a laceration). All nine injuries were to the head and facial region and occurred during a fall when the straps detached from the chair in some manner.

The most common way that the straps detached was when a clip (or butterfly knot cited in one case) holding the straps to the high chair came through the hole/slot in the back of the chair. However, there was one case where the screw installed to hold the strap to the chair didn't go through the strap to hold it in place. In five of the incidents it was stated that the restraint straps stayed on the child even as they detached from the high chair. In many of the cases, the incidents occurred when the tray was absent from the high chair.

Comments made about this particular hazard in the reports included:

1. The restraints were installed properly, but this happened more than once (straps detaching).
2. Consumer believed the buckle worked its way through, because the child is so active.
3. Unless the buckle/clip is exactly 90 degrees to the notch, it could come out if stressed.
4. One parent believes he installed the straps incorrectly.

Tray and Restraints Failed

These were high chair-related incidents where both the tray and the restraint straps failed in some manner. Nine children (averaging 14 months of age) were involved in these type incidents and four of those children were injured. All the injuries were to the head and facial area (2 bumps, 1 bruise and bleeding gums) and were the result of a fall from the high chair.

The failures of the tray and straps in the same incidents or with the same high chair occurred in the following ways:

- The child pushed the tray forward or released it, detaching it and then the strap did not keep the child secured.
- The tray released and the child's forward motion broke the belt's locking mechanism (1 incident) or disengaged the belt.

Slipped down in high chair

Although there were only nine reports associated with this particular hazard, 4 incidents were fatal. The death scenarios were as follows:

A 12-month-old male slid down in his high chair with his neck becoming pressed against the feeding tray. He died of positional asphyxia. It is uncertain as to whether the restraint straps were in use at the time of the incident.

A 10-month-old male slid down in the seat of the high chair below the tray. He asphyxiated due to the compression of his neck by the 2-point waist strap that had been tied instead of buckled.

A 13-month-old male was placed in the high chair unrestrained by the 3-point restraint straps, although the tray was in place. The child slipped down and was discovered with his chin resting on the tray. The likely cause of death was anoxia due to compression of the neck.

A 9-month-old female slid down in the high chair with her neck pressed against the tray and chin on the tray. The child's body was in one of the leg holes (separated by a passive restraint). Caregiver never used the 3-point restraints when putting the child in the high chair. The child died of positional asphyxia.

The average age of the children involved in incidents of this type was 10 months. In addition to the four deaths, there were three injuries. A 9-month-old suffered a forehead contusion when he fell out under a tray (unknown if restraint straps were in use). An 11-month-old received a linear fracture to his tibia when he slipped out of his high chair (unrestrained) that had been pulled up to the table for the child to eat. A near-tragedy occurred when an 18-month-old male got his cheek and chin pinned under the tray when he slipped down in his high chair. The 2-point waist restraint was found up around his chest. He received only minor scrapes to his cheek and chin.

The two non-injury incidents are of interest, because they were both caused by the crotch strap of the restraint being too large, allowing the child to slip down in the high chair. In one case a 6-month-old female slipped down to the point where she could have been caught on the tray. In the other case, another 6-month-old female got her head stuck between the seat and the tray. In both cases, someone intervened before the child was injured and these were not isolated occurrences of slipping down in the high chair for either child.

Child Could Unbuckle Restraints

There were eight reports of children being able to unbuckle the restraint straps of the high chair. The average age of the children involved in these incidents was 15 months of age, with the youngest child being 7 months old. There were two children injured (by falls) with this scenario. The injuries were a laceration to the head, and a scratched leg and bruised face.

Where the type of restraint was known, only 3-point restraint systems were mentioned and several cases indicated a center release buckle was involved. Five of the incidents had some potentially serious consequences from the child being able to open the buckle:

1. Child slid out between seat and tray, falling to the floor (lacerated forehead).
2. Only one side was unfastened and child fell out, hitting the floor while one hip was still fastened.
3. Foot got caught in harness and child was hanging upside down, hitting head on the metal frame (scratched leg, bruised face).
4. Child was believed to have unbuckled restraints and then buckled them without the crotch strap. As a result the child slid down in the high chair and started choking on the waist strap.
5. Child stood up, put his hands on the tray (which slipped in food) and he fell hitting the floor.

Hanging

There were three reports of hanging. Among the three reports were one incident of death and one injury. The average age of the children involved in these types of incidents was 8 months, with the youngest child at 7 months of age. The one death was as follows:

A 9-month-old female was left unattended in a high chair at a day care center. She was found hanging from a strap that she became entangled in. Nothing is known about the type of restraint straps on this high chair. The cause of death was strangulation.

The one injury event occurred when a child fell out of her high chair sideways and the straps began to choke her, scraping her neck. The remaining incident (with no injury) happened when the waist strap was not attached to the high chair, causing the child to become suspended upside down by the crotch strap when the tray was removed. There appears to be no particular pattern with these hanging events.

The remaining hazard patterns came from 15 reports associated with restraints unbuckling, restraints not being used, entrapment and miscellaneous incidents that could not be categorized. Most notable were the two entrapment deaths, described as follows:

An 11-month old male attempted to exit the high chair and got his head wedged between the seat and the armrest. His face was in the seat cushion and he suffocated. The high chair was purchased at a thrift store with the restraints already cut off.

A 12-month-old male attempted to get out of the high chair, but got stuck with his head wedged between the armrest and the seat on one side of the chair. He was found hanging. He had not been buckled into the 3-point restraint system. The cause of death was asphyxia due to hanging.

Restraint Characteristics

Where the information was available, most of the restraints on the high chairs in the data reviewed were 3-point restraints (waist and crotch straps). There were some 2-point restraints (waist strap) mentioned, but only two 5-point restraints (waist, crotch and shoulder straps) were cited in the reports. When reviewing cases, where a buckle was involved in the incident, several types were mentioned: a locking mechanism similar to that on a seat belt, side release, and center release. Nineteen reports mentioned the presence of a passive restraint on the high chair (attached to the seat or tray).

Comments

When looking at these incidents overall, the two most prevalent hazards were the tray disengaging and the restraint straps failing to hold the child. These hazards accounted for almost half of the incident reports (71). Many of these incidents were not one-time events with the high chair. Children were able to disengage the tray's locking mechanisms with their feet or simply put pressure on the tray to release it. Accessibility to the locking mechanism by the child and the force it takes to disengage a tray are areas that could be explored.

The failure of a secured restraint to hold a child in the seat is a more complex issue. The ability to hold a child secure may depend on things like the adjustability of the straps, where the straps are attached to the chair, or the length of the crotch strap. This too could be a candidate for further study.

Passive restraints have been incorporated into the design of recently manufactured high chairs to prevent the classic "submarining" of a child under a tray. However, one of the recent deaths (involving a hanging) cited in this report showed that a child could get her body between the passive restraint and side of the high chair and hang on the tray. This event was brought to the attention of the Chairman of the ASTM subcommittee on high chairs (F15.16), in a February 15th letter from CPSC Engineering staff. This letter alerted industry to our concerns for the potential of additional incidents of this type if the situation is not addressed.

Appendix A

High Chair Restraints 1/1/1998 to 2/7/2001

Document #	Date	Age/Sex	City/State	Type Restraint	Type Hazard Scenario	Narrative
<p>HAZARD CODING: Child could unbuckle restraints=U Straps detach from the chair=D Slipped down in high chair=S Tray and restraints failed=TR Tray disengaged or child disengaged it=TD Restraints failed to hold the child=R</p>						
<p>Restraint system broke=B Restraints unfastened=RD Restraints not used=RN Hanging=H Asphyxiation/suffocation=A Other=O</p>						
1 19960091A	00/00/1998	9 MO M	Ambler, PA	Unknown	Restraint detached from the back of the chair. No Injury. D	Child was being fed and mother turned away. When she turned back the child was standing, leaning over the tray with the strap around him, but not fastened to the chair. The strap had slipped through the back of the chair. Consumer claims there is no metal fastener to keep the strap from slipping through. It was installed properly, but this happened more than once.
2 10050024A	00/00/1998	6-12 MO F	Plano, TX	Unknown	Belt disengaged from chair. D	Child was sitting in high chair, being fed. The belt slipped out of the hole in the back of the chair. The consumer's solution was to tie a knot in the back of the belt. Child can stand up in the high chair with the safety belt still on and can also get out of belt. Consumer feels the belt should be adjustable.
3 19920090A	Product purchased 1/98	14 MO ?	Athens, GA	Unknown	Can stand up with restraints still on. R	

Document #	Date	Age/Sex	City/State	Type Restraint	Type Hazard Scenario	Narrative
4 NEISS	01/03/1998	14 MO F	Unknown	Unknown	Pushed tray off. Confusion to face. TD	Child pushed the tray off the high chair and fell to the floor.
5 H9810073A	01/06/1998	3 YR F	Garland, TX	Passive restraint	Restraint bar cracked. No Injury. B	Consumer discovered that the restraint bar (passive restraint) of the high chair was cracked. The high chair's tray attaches to the restraint bar.
6 H9810133A	01/11/1998	10 MO M	Garfield, AR	Passive restraint	Restraint bar broken. No Injury. B	Consumer removed tray and found the high chair's plastic restraint bar broken (passive restraint).
7 NEISS	02/09/1998	9 MO M	Unknown	Unknown	Fell out under tray. Forehead contusion. S	Child fell out of high chair underneath the tray.
8 H9940055A	03/00/1998	5 MO F	Corona, CA	Unknown	Tray disengaged. No Injury. TD	Consumer had a difficult time locking the high chair's tray into place. When it was finally locked, she noticed that if her daughter leaned forward onto the tray or pushed on it, the tray would pop off the high chair on one side. Eventually the child could lift the tray from behind and pop it off herself.
9 H9830131A	03/09/1998	11 MO F	Arcata, CA	3-point (waist and crotch straps)	Pushed tray off. No Injury. TD	Child was secured in the high chair with the tray locked in place. She put her feet against the lip of the tray the pushed hard enough so the tray disengaged. Consumer feels the latching device is too close to a child's reach.

Document #	Date	Age/Sex	City/State	Type Restraint	Type Hazard Scenario	Narrative
10 H9870176A	04/00/1998	10 MO M	Lock Haven, PA	Unknown	Belt unfastened and child stood up. No injury. RD	Child was secured in the high chair by the waist strap, wiggled around in the chair and turned backwards to get up on his feet. The waist belt loosened and unfastened.
11 H9840010A	04/05/1998	3 YR M	Benicia, CA	Passive restraint	Broke the restraining bar. Abrasion to back. B	With the tray removed from the high chair, the child stretched, applying pressure to the restraining bar (passive restraint). The restraining bar failed, breaking off at the locking mechanism and the child fell to the floor.
12 980507HEP9104 NEISS No Sample	04/21/1998	11 MO M	Gaithersburg, MD	Unknown	Unrestrained in high chair and fell. Linear fracture to tibia. S	Child was placed in the high chair unrestrained and the high chair was pulled up to the table for the child to eat his food. The child was moving around and slipped right out of the chair to the floor.
13 980527CCC1442 H9850211A	05/15/1998	10 MO M	Philadelphia, PA	3-point (waist and crotch straps)	Waist strap detached from back of chair. Bump and bruise to forehead. D	A waist strap detached from the high chair when the buckle holding it to the back of the chair slipped through its slot, allowing the child to become unrestrained and fall to the floor. Caregiver had just removed the tray and believes the buckle worked its way through the slot because child was so active during feeding, moving around in the high chair.
14 980611CCC0502 H9850175A	05/18/1998	9 MO F	Landover, MD	3-point (waist and crotch straps) with a passive restraint.	Able to unbuckle seatbelt. Laceration to head. U	Child was able to unbuckle side release buckle of seatbelt and slid out between the seat and tray, falling feet first to the floor and then forward with her head hitting a cabinet.

Document #	Date	Age/Sex	City/State	Type Restraint	Type Hazard Scenario	Narrative
15: H98860045A	06/04/1998	18 MO M	Flint, MI	2-point (waist strap)	Slipped down and got caught on tray. Minor scrapes to lower right cheek and chin. S	Child was secured in high chair by the waist strap and the tray was locked into place. Consumer left room and came back to find her son had slipped down in the high chair. His lower right cheek and chin were pinned underneath the tray and the waist strap was around his chest.
16: 980825CC2805 H9880034A	08/01/1998	11.5 MO F	Kingsland, GA	2-point (waist strap with locking mechanism similar to a seat belt on a motor vehicle)	Tray and restraint did not secure child/failure. No injury. TR	Child fell to the floor after apparently pushing the tray forward, detaching it. The child was buckled to the high chair, but the strap did not secure her in the chair. The consumer had noticed that the tray could not be securely attached to the high chair even before the incident.
17: 980814HCC0652 X9884594A X9884625A 9812102007 No Sample	08/05/1998	9 MO F	Winter Garden, FL	Unknown	Hung in high chair strap. Death. H	At a day care center, child was left unattended in a high chair after feeding. Then was found hanging from the strap of a high chair she became entangled in. Strangulation.
18: H9880280A	08/31/1998	8 MO M	Lake Mary, FL	Unknown	Tray disengaged. No injury. TD	Child placed in high chair, secured by waist strap and tray locked on. Child released the tray by slightly pushing it. Child remained in the high chair.
19: 990414HCC2415 9839075300 No Sample	08/31/1998	12 MO M	Canton, OH	3-point (waist and crotch straps)	Possibility that restraints were not in use. Death. S	Child slid down in high chair with neck pressed against feeding tray. It is uncertain whether the restraints were in use at the time of the incident. Positional asphyxia.

Document #	Date	Age/Sex	City/State	Type Restraint	Type Hazard Scenario	Narrative
20 H98A0056A	09/00/1998	10 MO M	Rockaway, NJ	3-point (waist and crotch straps)	Almost fell out of secured restraints, no tray. No injury. R	Child was secured in high chair and complainant was about to put on the tray when the child leaned forward. He almost slipped headfirst out of the straps, but was caught by complainant. The straps didn't loosen or break, but the complainant feels that the waist strap is positioned too low because it fits at the top of the child's thighs instead of at the waistline.
21 981102CCCC6039 H98A0169A	09/01/1998	6 MO F	Watsonville, CA	3-point (waist and crotch straps) without a passive restraint.	Crotch strap allows child to slip down in seat. No injury. S	Child continually slips down in her high chair because the crotch strap is too large and can't be adjusted like the waist straps. The first time it happened the child's head got stuck between the seat the tray and was immediately righted.
22 980911CCCC5834 H9890023A	09/03/1998	11 MO M	Ketchikan, AK	3-point (waist and crotch straps)	Restraint separated from high chair. Hematoma to face. D	Child fell from high chair when the metal buckle that hold the straps to the back of the high chair came out of the notch it locks into. Mother stated that unless the buckle was at exactly 90 degrees to the notch it could come out if stressed. When the victim fell forward he hit his head on the floor as he hung in part of the restraint by his right leg. The mother had removed the tray and turned towards the sink when the victim lunged forward.
23 980925CCCC0736 H9890063A	09/04/1998	5 MO M	Forest City, PA	3-point (waist and crotch) with passive restraint attached to the seat	Passive restraint broke off. No injury. B	Child was strapped into a high chair and the child leaned forward and the plastic passive restraint bar between the child's legs broke off although the restraint strap held the child in the high chair.

Document #	Date	Age/Sex	City/State	Type Restraint	Type Hazard Scenario	Narrative
24 980926CCCC2854 H9890090A	09/04/1998	9 MO F	Canton, OH	3-point (waist and crotch straps)	Able to stand up in high chair. No Injury. R	Multi-use high chair didn't have an adjustable crotch strap and child was able to stand up in chair.
25 980928CCCC4006 H9890125A	09/13/1998	6 MO F	Austin, TX	3-point (waist and crotch straps)	Restraints are not adjustable and too loose. No Injury. R	Child was secured with 3-pt restraints and tray was removed. Straps were so loose as child leaned over she was about to fall out, but mother caught her. Crotch strap is too long and not adjustable. The parents feel the waist strap should be situated higher.
26 980925CCCC0738 X9895225A 9842093836	09/20/1998	10 MO M	Sewickley, PA	2-point (waist strap) tied instead of being buckled.	Slid down in seat and got caught at neck by restraint. Death. S	Victim slid down the seat of the high chair below the tray. Asphyxiated due to compression of the neck by waist strap that had been tied instead of buckled.
27 NEISS	09/23/1998	10 MO M	Unknown	Unknown	Pushed tray off. Contusion/abrasion to nose. TD	Child sitting in a high chair pushed the metal tray and fell to the ground striking nose on the tray.
28 NEISS	09/26/1998	8 MO M	Unknown	Unknown	Forgot to restrain. Fractured humerus. RN	Child fell out of high chair when his mother forgot to strap him in.

Document #	Date	Age/Sex	City/State	Type Restraint	Type Hazard Scenario	Narrative
29198B0019A	11/02/1998	15 MO M	Santa Monica, CA	Unknown (appears to be a 3-point)	Stood up and got out while restrained. No Injury. R	Despite being buckled into the high chair, the child stood up and crawled out onto the kitchen table. Consumer believes the design of the belt system is at fault. She said "all three prongs" of the belt attach in one place (center release buckle?) which enables the child to stand up and crawl out. The belt has been tightened as much as possible and the child can still get out.
30 NEISS	11/09/1998	2 YR F	Unknown	Unknown	Tray broke. Facial contusion. B	Child was in high chair when the tray broke off and she fell to the floor.
31 H0010116A	12/00/1998	10 MO F	Ebensburg, PA	Unknown	Stood up in high chair. No Injury. R	Using high chair and child started to stand up. Consumer stopped child. Seat belt is not adjustable giving child too much mobility and tray leaves a gap that allows child to stand.
32 10110178A	Product purchased 1999	19 MO F	Beavercreek, OH	Unknown	Stands up in high chair. R	No matter how tight the restraint belts or how close the tray is to the child's body, she can stand up.
33 990120CC0234 19910048A	01/09/1999	12 MO F	Clifton, VA	3-point (waist and crotch straps) with no passive restraint.	Tray released and safety belt's locking mechanism broke. No Injury. TR	Child fell out of high chair after the tray released (assumed by parents that child released the tray with her feet). Then with the child's forward motion the safety belt's hard plastic locking mechanism broke. The buckle was a center release type.

Document #	Date	Age/Sex	City/State	Type Restraint	Type Hazard Scenario	Narrative
34 NEISS	01/14/1999	18 MO M	Unknown	Unknown	Climbed out with restraints fastened. Probable fractured elbow. R	The child fell climbing out of his high chair with the restraining lap belt in place.
35 19910136A	01/15/1999	6 MO M	Weston, FL	Unknown	Restraint belt unfastens. No injury. RD	The safety belt has come unfastened three times during the use of this high chair. The child can not unfasten it by himself.
36 H9920023A	01/19/1999	16 MO F	Bath, ME	Unknown	Cracked tray lever. B	Consumer discovered that the tray had a cracked lever which does not allow the tray to be mounted properly to the high chair. She feels her child could fall out of the chair.
37 19910168A	01/26/1999	9 MO F	Chicago, IL	Unknown	Lap belt comes undone. RD	The lap belt clips come undone so when the tray is removed the child leans over and falls out of the high chair. This happened a number of times, even when the consumer made sure the lap belt was clipped.
38 19920001A	01/30/1999	9 MO M	Auburn, AL	Unknown	Can stand up after loosening belt. No injury. R	Child was able to loosen the seat belt on his high chair and stand up. Consumer states that the belt is made of a silky nylon and the plastic restraint clip does not have teeth to grip the strip. If the clip is angled away from the body, the strap can readily slide out of the clasp, loosening the belt.
39 NEISS	02/13/1999	9 MO F	Unknown	Unknown	Not restrained. Forehead laceration. RN	Child fell from the high chair and struck her forehead on a table. She had not been strapped in.

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40 H9920149A	02/23/1999	2.5 YR M	Windsor, CA	Unknown	Part of tray broke. B	The center support that locks the tray and holds the child in broke into pieces.
41 H9920162A	02/24/1999	10 MO F	Monroe, NC	Unknown	Strapped in and got out of restraints. No Injury. R	Child was in high chair with safety strap tightly secured. The tray was removed for cleaning, the child climbed out of the strap and started climbing onto the table.
42 H9970031A 010111CCCC0209	03/00/1999	9 MO M	Canandaigua, NY	3-point (waist and crotch)	Slid out of straps and fell. Mild concussion. R	Child was secured in the high chair by a 3-point system that could not be adjusted to fit him properly. He leaned over the side of the chair, slid out of the restraints and fell out, striking his head on a table.
43 H9930300A	03/17/1999	24 MO M	Warwick, RI	2-point (waist strap)	Leaned forward and straps detached. No Injury. D	Child was secured by waist straps and leaned forward and the straps detached (unknown how). There was no visible damage to the straps or chair. Child was caught before falling.
44 H9940001A	03/18/1999	13 MO F	Louisville, KY	3-point (waist and crotch straps) with no passive restraint	Can get out of restraints with them still fastened and stand up. No Injury. R	Child was secured in restraints and slipped out of them. She stood up and leaned over the edge of the high chair, nearly toppling out. Her father caught her. The straps remained fastened during the incident, but may have loosened according to the consumer. In another incident, the child was put in the same high chair for a feeding and within 20 seconds was out of the belt and climbing onto the tray.
45 H9940074A	04/03/1999	12 MO F	Cleveland, OH	3-point (waist and crotch straps)	Tray detached. Laceration to lower lip. TD	Child was secured in high chair by restraints when she leaned against the tray it popped off. Still strapped in the chair, she fell to the floor.

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46 990420CC2427 19940047A	04/06/1999	8 MO M	Davenport, IA	3-point (waist and crotch straps) no passive restraint	Restraint disengaged from the back of the high chair. Swollen, bruised forehead. D	Child leaned forward in high chair and seat belt came completely off the chair, allowing the child to fall with the restraints still on his body. Mother was just about to install the tray. Restraints are held to the back of the seat by a clip that passes through a slot.
47 19940159A	04/21/1999	1 YR M	South Jordan, UT	Unknown	Tray fell off, fall. No Injury. B	Child was sitting in his high chair when the "restraint bar" popped off and the tray fell off. The child fell, but was caught.
48 H9940348A	04/23/1999	14 MO M	Blackwood, NJ	3-point (waist and crotch straps)	Released tray. No Injury. TD	Secured in the high chair, on several occasions the child has stretched his legs and released the tray's locking mechanism with his knees. The mechanism is located on the bottom right from of the tray.
49 19940181A	04/24/1999	10 MO F	Unknown	Unknown	Belt came out of the back of the seat. D	Child was securely fastened in the seat belt. She leaned forward and the seat belt came completely out of the back of the seat. It was simply held by a butterfly knot arrangement through an opening in the back of the seat.
50 H9950041A	05/04/1999	21 MO F	Eden Prairie, MN	2-point (waist strap) and passive restraint.	Tray and restraint bar detached. Laceration above eyebrow. TD	Child was not secured by the waist belt of the high chair and attempted to get out of the chair. The restraint crotch bar and tray abruptly detached from the chair and the child fell to the floor.

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51 H9950067A	05/06/1999	12 MO M	Leesburg, VA	3-point (waist and crotch straps)	Restraints detached from the high chair. No Injury. D	Child was secured in the high chair and consumer removed the tray. The child leaned forward and fell from the chair. The straps remained secured to the child's body, but they detached from the chair. The restraints are secured to the back of the chair through a hole.
52 19950080A	05/15/1999	9 MO F	Unknown	Unknown (appears to be a 3-point)	Able to stand up in high chair. R	Child can turn herself around and pull herself up to a standing position in her high chair. Consumer has had waist strap very tight, but the crotch strap can't be adjusted.
53 H9950229A	05/24/1999	9 MO M	Wysox, PA	3-point (waist and crotch straps)	Tray locking mechanism broke. No Injury. B	Child was secured in the high chair when the consumer removed the tray. As she did so, the tray's locking mechanism broke.
54 H9970174A	06/00/1999	11.5 MO M	San Diego, CA	3-point (waist and crotch straps)	Pushed tray away with feet. No Injury. TD	Child was secured in high chair by its waist strap and was able to push the tray away from him with his feet. Consumer feels the tray should have deeper grooves to secure the tray.

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55 990625CC3384 H9960214A	06/18/1999	10 MO F	Sealy, TX	3-point (waist and crotch straps) with no passive restraint. Buckle is side release type.	Able to release tray and restraint failed. Bleeding gums. TR	Mother never used side locks on the tray, only the front lock/release lever. Child constantly put her foot in that area and mother would stuff paper towels in there to try to keep her foot out. On the day of the incident the child's foot released the front release and the tray fell off. As soon as the tray fell the restraint buckle unfastened (unknown how) and the child fell forward out of the chair with one leg entangled in the seat restraint. She hit her mouth on the tray on the floor as she was suspended upside down.
56 19960190A	06/25/1999	17 MO M	Bethlehem, PA	Unknown	Able to unfasten harness. U	Child unfastened one side of the harness on his high chair and tumbled out, hitting the floor while his other hip remained fastened.
57 000503HC0632 H0040222A No Sample	07/01/1999	15 MO M	Martinsburg, WV	3-point (waist and crotch straps). Two ends of waist straps fit into end of crotch strap (center release?).	Tray and half the safety belt disengaged. No injury. TR	Parent assumed that the child pushed the tray away from his body as he attempted to stand up in the high chair. The tray fell off and half of the safety belt disengaged from the crotch strap. Upon examination after the incident, the complainant tried to lock the tray's latches in place, but was unsuccessful. She also found that one half of the safety belt was looped through the plastic locking device, but not sewn.
58 H9970306A	07/14/1999	20 MO F	New Providence, NJ	2-point (waist strap)	Able to push tray with his feet. No injury. TD	On several occasions the child was able to push the high chair's tray with his feet. On the middle of the tray is a push snap release that his foot can press open and then push the tray off.

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59 990922CC0743	07/20/1999	2 YR M	Chesapeake, VA	3-point (waist and crotch straps) with passive restraint on the seat.	Housing that connects the tray to the chair broke. No Injury. B	Child was secured in the high chair by the seat straps when the adults heard a cracking sound from the chair. Three pieces of the channeled housing that connects the tray to the chair broke off. The tray remained in place and so did the child.
60 990812CEP9001 NEISS	07/22/1999	12 MO M	Tucson, AZ	3-point (waist and crotch straps) with passive restraint on the seat and connected to the arms as one piece.	Not restrained securely by harness. O	Child was put in high chair for a snack and the seat belt was loosely secured around child by mother. The tray was attached. The child then climbed out of the high chair and fell to the floor. The tray did not release and the belt was still latched.
61 X9982977A	08/11/1999	2 YR M	German town, MD	Unknown	Tray disengaged. Lacerated neck. TD	Child fell from his high chair when the tray gave way. He had been eating bowl of ice cream and the broken pieces of the bowl badly cut his neck, including major blood vessels.
62 19980086A	08/11/1999	10 MO F	Fort Walton Beach, FL	Unknown	Could climb out of high chair. R	On several occasions the child has climbed out of the high chair. Each time the child was secured in the chair.
63 H9980220A	08/19/1999	10.5 MO M	Hornell, NY	3-point (waist and crotch straps)	Restraints detached from the high chair. Bump to forehead. D	Child was secured in the high chair by the restraints when the consumer's fiancée removed the tray. The straps detached from the back of the seat and the child fell to the floor with the straps still secured around him. The metal clip that secured the straps in place had disengaged.

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64 000824HAA0977 10060208A Sample #00-800-1833	08/20/1999	6 MO F	Belmont, MA	3-point (waist and crotch straps) and no passive restraint. No injury.	Able to stand up when adjustable restraints loosen. No injury. R	Child is 16 months old at the time of this IDI, but since age 6 months has been able to get out of the restraints of her high chair. Restraint is always adjusted securely to fit around her waist, but the complainant feels that the smooth finish of the woven filament belt allows the restraint to loosen as the child moves around. Then the child can stand up.
65 990914CC0722 H9990063A	08/22/1999	4 MO F	Destin, FL	2-point (waist strap) and passive restraint on the tray.	Failure of waist strap connection to side release buckle. Bump on head. B	Child fell to floor when the waist strap to her high chair came apart as she leaned forward. The nylon strap came out of the buckle. Mother stated that she never used the tray which flips over the head of the child and therefore never used the restraint strap that fits between the child's legs and snaps to the tray.
66 990921CC2666 19990135A	08/24/1999	11 MO F	Harbor Springs, MI	3-point (waist and crotch straps) with passive restraint.	Unrestrained and disengaged the tray. Lost 2 bottom teeth. TD	Child was placed unstrapped into a high chair at day care with the tray snapped on. She disengaged the press-release tray by kicking it and then leaned forward, falling out of the high chair.
67 19990077A	08/31/1999	11 MO M	Louisville, KY	Unknown	Straps gave out, fall. Lump on head. O	Consumer said this high chair does not have a crotch post (passive restraint?). The child was moving around in the chair and the safety straps "gave out" and the child fell.
68 19990224A	09/00/1999	18 MO M	Unknown	Unknown	Tray disengaged. No Injury. TD	Child leaned forward in high chair and with a little force the tray popped off and the child fell out.

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69 000523HCC0688 10040303A No Sample	09/00/1999	6 MO F	Bethlehem, PA	3-point (waist and crotch straps)	Slips through restraints. No Injury. S	Restraints were replaced by manufacturer when originals became worn. The new restraints were too large and could not be adjusted to fit the child properly. The crotch strap was too long to restrain the child in the high chair. The child slipped down to a point where her head could have been caught by the tray. Child was rescued from the position several times by parents. Restraints are fastened to the back of the chair and the child sits on part of the crotch strap.
70 H99990041A	09/01/1999	7 MO M	Salem, MA	3-point (waist and crotch straps)	Detached tray. No Injury. TD	Child was not secured in the restraints, but the tray was locked in place. He kicked against the tray from underneath and the tray detached and fell to the floor. Child was caught before he fell. Another time he was secured in the restraints and he kicked the tray off again. Even with the straps secured tightly, the child can lean dangerously close to the open area.
71 000307HCC2355 199C0091A No Sample	09/01/1999	14 MO F	Chesterfield, MO	Unknown	Could stand up in high chair while strapped in. No Injury. R	Restraints are not sufficient to keep child from standing up in high chair. With straps securely and tightly fastened and the tray in place, the child was able to stand up in the chair. Consumer said that the snap locks on the restraint were very difficult to secure and seemed latched when they weren't. Original unspecified restraints were replaced with a 5 point system.

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72 990916CC3488 1999091A	09/05/1999	8 MO F	Delta, CO	3-point (waist and crotch straps) and a passive restraint on the tray.	3-point harness detached from high chair. Facial bruises. D	Child incurred facial bruises when she fell out of her high chair when the safety harness detached from the seat of the chair and the tray somehow detached. The child fell face first onto the kitchen floor with the safety harness still attached to her with its buckle fastened.
73 1990149A	09/17/1999	6 MO M	Brookfield, MA	Unknown	Seat belt broke off. B	Child was sitting in the high chair and the seat belt broke off and he fell to the floor.
74 991109CC3041 X99A3520A 9906172917	09/29/1999	12 MO M	Patterson, CA	3-point (waist and crotch straps) and no passive restraint on tray.	Unrestrained in high chair and hanged. Death. H	Child attempted to get out of high chair, but got stuck with his head wedged between the armrest and the seat on one side of the high chair. He was found hanging in that position. He was not buckled into the restraint system, but the tray was on the high chair. Asphyxia by hanging.
75 H99A0030A	10/05/1999	8 MO M	Torrance, CA	Unknown	Able to release restraint buckle and fell. Scratch on leg and bruise on face. U	Child was in high chair and was able to press the release button for the seat belt. She fell with her foot getting caught in the seat belt harness and was upside down, hanging from the high chair. She hit her head on the high chair's metal frame.

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76 991013CCN0370 H99A042A	10/07/1999	3 YR M	Hubertus, WI	3-point (waist and crotch)	Waist strap detached from the back of the high chair. Mouth laceration. D	One of the restraining straps securing the child slid out of the bottom seam on the chair back and let loose, allowing child to fall to the floor. Father had just removed the tray after feeding the child and his son pushed forward trying to get out. Apparently the screw or bolt did not go through the strap, but had only caught the strap, indenting it. The manufacturer said that two of the screws on the back on the chair were supposed screw directly through the strap holding it in place. Apparently, when the screws were put in they missed the strap.
77 991208HBB3061 F99B5010A 9906173408 No Sample	10/20/1999	11 MO M	Ventura, CA	Unknown	Restraints absent from high chair. Death. A	High chair had been purchased at a thrift store with restraints already cut off. Child was placed in the chair for a snack and was left unattended, with his mother checking on him periodically. The victim had attempted to get out of the high chair and his head became wedged in between the seat the bottom of the right armrest. He was found with his face in the seat cushion and the back of his head caught under the armrest for the tray with the tray attached. Suffocation.
78 H99A0137A	10/20/1999	11 MO M	Bloomington, MN	3-point (waist and crotch straps)	Twisted out of restraint and fell. No Injury. R	Child was tightly secured in high chair by restraint and tray was in place. He was able to twist out of the restraint and fell onto the floor.

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79 H0020148A	11/00/1999	13 MO M	Howell, MI	3-point (waist and crotch straps)	Can disengage the release on tray. No Injury. TD	Child secured in high chair often hits the tray release lever underneath the tray with his knee or foot. This causes the tray to detach.
80 H999B0069A	11/08/1999	11 MO F	Fort Tobacco, MD	Unknown	Belt unfastened on its own. No Injury. RD	Child was secured in the high chair by the waist belt and consumer turned to get the tray. The seat belt unlocked and the child fell out of the chair. Seat belt doesn't lock properly. When it clicks and the consumer assumes its locked, it is not.
81 000419HCC2460 10040058A No Sample	11/01/1999	12 MO M	Clawson, MI	3-point (waist and crotch straps) with no passive restraint.	Stood up with restraints still fastened. No injury. R	Child was able to stand up in his high chair with his restraints still fastened securely and the tray on. Crotch strap extends from the back of the chair at a center point along with the waist straps. Hence, when the system is fastened the child would be sitting on a portion on the crotch strap.
82 NEISS	11/14/1999	7 MO M	Unknown	Unknown	Tray not locked. Closed head Injury. TD	Mother states that the high chair tray was not locked and the child fell to the floor.
83 000329HCC3194 H999B0112A Sample #00-860-6135	11/12/1999	15 MO F	Clovis, CA	3-point (waist and crotch straps)	Wiggled out of restraints and stood up. No injury. R	Child was seated in high chair with the restraints secured and mother suspects that the child must have wiggled out of the restraints. The child then stood up and attempted to walk on the feeding tray, but was rescued. The feeding tray was fully inserted and the child did not defeat the fasteners of the restraint.

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84 199B0141A	11/16/1999	19 MO M	Woodcliff Lake, NJ	Unknown	Can disengage the release on tray. No Injury. TR	Child lodged his foot under the bar to release the tray of his high chair. The tray disengaged and fell to the floor. The child then wiggled out of the restraints (described as "not a 5-point harness") and almost fell to the floor. He was caught before he fell. The child continues to disengage the tray after the manufacturer sent a 5-point harness as a solution. The child is learning how to get out of that harness belt.
85 199B0165A	11/19/1999	13 MO F	Woodbury, NY	Unknown	Able to wiggle out of the belt and stand up. R	Child wiggled out of the belt on the high chair and stood up. She fell to the floor.
86 H99B0277A	11/29/1999	10 MO F	Chicago, IL	3-point (waist and crotch straps)	Able to unhook buckle of safety belt. No Injury. U	Child was secured in chair by restraint straps and consumer turned around, turning back to find her daughter unhooking the buckle on the safety belt.
87 H0080295A	12/00/1999	10 MO M	Raytown, MO	Unknown	Tray keeps breaking. No Injury. B	Consumer removed the tray from the high chair and end that locks on to the chair broke off. This happened with 6 different replacement trays also.
88 000329HCC0515 10010366A No Sample	12/00/1999	11 MO M	Vienna, VA	3-point (waist and crotch straps)	Could wiggle out of restraints. No Injury. R	Child was able to wiggle out of his high chair restraints (still fastened) and stand up on a daily basis. The feeding tray would be on the chair ninety percent of the time and pulled close to the child. All the straps seemed to be attached a seat level.

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89 10040153A	Product purchased 12/99	5 MO F	Oxnard, CA	Unknown	Disengages tray. No Injury. TD	Child, 14 months old, has been releasing/unlocking her tray since she was 5 months old.
90 H0010234A	12/00/1999	11 MO F	Broomall, PA	Unknown	Belt unfastened on its own. No Injury. RD	Consumer fastened the seat belt of the high chair around her daughter's waist. The belt opened/unfastened on its own and child almost fell out of the chair. This happened several times.
91 000420HCC0593 H040029A Sample	12/01/1999	7 MO F	Baltimore, MD	3-point (waist and crotch straps) and no passive restraint. No injury.	Could wiggle out of restraints. No Injury. R	Child was put into restraints and tray put on high chair. Then child was found standing on the tray, having wiggled out of the restraints. Complainant feels tray does not go close enough to child. Restraints are attached at the back of the chair and child sits on a portion of the crotch strap when it is secured.
92 991216HCC0199 199C0106A No Sample	12/14/1999	21 MO M	Suffern, NY	3-point (waist and crotch straps)	Able to disengage the lock mechanism on tray. Restraints also disengaged. No Injury. TR	On one occasion the restraint system (belt) disengaged on one side, the tray was not in place and the baby fell, but was caught. The child, on several occasions, had disengaged the tray lock mechanism on the underside of the tray with his foot, sending it to the floor. To release the lock one places the palm of the hand under the tray and with a finger releases the mechanism by pulling toward him. There is a raised feature called a "safety ramp" which is in front of the release, that is easily circumvented by a child.

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93 000328HCC2388 H99C0216A No Sample	12/19/1999	12 MO M	St Francis, WI	3-point (waist and crotch straps)	Waist strap detached from the back of the high chair. Severe bruise to forehead. D	Mother removed tray and child fell out of the high chair. The lap restraint the child was secured in had completely come out of the back of the chair. It was held onto the back side of the chair by a metal clip that went through a slit in the back of the chair. The child's left leg was still held upward by the crotch strap and the side of his forehead hit the floor.
94 000615HBB2620 H0060157A Sample #00-830-5353	12/25/1999	13 MO M	Mequon, WI	3-point (waist and crotch) with no passive restraint.	Child could loosen straps by moving, stand up and fall. Bump on side of head. R	Consumer tightened restraint straps securely around child and inserted the tray. Child moved around in the high chair, loosening the straps. He then stood up and fell over the side of the chair to the floor.
95 010110CCC2186 10080108A	1/2000 to 8/2000	1 YR M	St Louis, MN	3-point (waist and crotch straps) with passive restraint on the tray.	Can wiggle free of secured restraints. No injury. R	When placed in the high chair using the restraints the child is able to wiggle free and stand up the chair. Tightening the adjustable straps does not prevent the child from doing this.
96 000503HCC2513 H0040246A No Sample	01/01/2000	9 MO F	Detroit, MI	3-point (waist and crotch) with passive restraint attached to the tray.	Did not use restraints and tray disengaged. Bruise to forehead. TD	Consumer does not utilize the restraints, but watches the child closely. The child was placed in the high chair and the tray was locked into place. The tray disengaged and the child fell, hitting her forehead on the t-bar on the tray. Tray had no visible damage or defect.
97 199A0071A	01/20/1999	11 MO M	Dallas, TX	Unknown	Can get out of seat belt. R	Child has easily gotten out of seat belt on the high chair no matter how tightly it is put on. He has fallen out twice.

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98 10020314A	02/00/2000	18 MO M	Washington, D.C.	Unknown	Tray can be easily disengaged. TD	Child repeatedly removes the high chair's tray by pressing the release mechanism with his foot.
99 H00302221A	02/00/2000	15 MO M	Roanoke, VA	T-strap (3-point?)	Kicked tray off. No Injury. TD	Secured in high chair by t-straps with tray on. Child kicked the tray's locking mechanism, causing the tray to fly out.
100 000210CCN0096 G0020158A G0020523A	02/05/2000	9 MO F	St Claire Shores, MI	3-point (waist and crotch straps) with a passive restraint on the tray.	Restraints not used. Death H	Child slid down in high chair with neck pressed against feeding tray and chin on the tray. The child's body was in one of the leg holes (leg holes separated by a passive restraint T-bar). Caregiver never used 3-point restraints when putting the child in the high chair. Positional asphyxia.
101 10020206A	02/16/2000	16 MO M	Uniontown, OH	Unknown	Can detach tray. TD	High chair tray had a release on the front of the tray. The child can put his feet up on the release of the tray and the tray falls off the high chair.
102 H0040044A	03/00/2000	24 MO M	Buffalo, NY	Unknown	Tray detached. Minor bruise to forehead. TD	Child hit the tray on his high chair and it broke apart from the chair and hit his head.
103 000620HBB0771 H0060215A Sample #00-800-2913	03/00/2000	9 MO F	Kathleen, GA	2-point (waist strap) with passive restraint as part of a t-bar configuration of the seat.	Child could loosen straps by moving stand up. No Injury. R	Child strapped in high chair with the safety belt locked in place could move around enough to loosen it and stand up. The belt ended up around her feet. The complainant sat the child down again and tightened the safety belt. The child started moving around and put her hands on the tray, pulling herself up. Discontinued use of high chair.

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104 000309HCC0484 10030069A No Sample	03/05/2000	10 MO M	Port Chester, NY	3-point (waist and crotch straps) with a center release buckle.	Able to release buckle. No Injury. U	Child disengaged restraint buckle on his high chair. restraint system was a replacement that the manufacturer sent to the consumer.
105 H0030127A	03/13/2000	11 MO M	Lincoln, KS	Unknown	Able to release tray. No Injury. TD	Child was sitting strapped by the seat belt in the high chair and kicked the safety release bar on the tray. The tray came off and fell to the floor. This event occurred frequently, not just the one time.
106 000419HCC2459 H0030310A No Sample	03/13/2000	12 MO F	Dubach, LA	3-point (waist and crotch straps with a center release buckle) with a passive restraint.	Tray came off and restraints loosened. Knot on head and bruised knees. TR	Child was moving around in the high chair and banging her knees against the tray. The tray came loose, the victim unloosened the restraints and the tray launched forward with the victim falling forward to the floor. Mother believes both the safety belt and tray latching mechanisms are defective.
107 001031CWE6010 H00A0311A Sample #01-840-6195	04/00/2000	15 MO M	Calabasas, CA	3-point (waist and crotch straps) with passive restraint on the seat.	Disengaged latch on feeding tray. No Injury. TD	On more than one occasion, the child disengaged the locking latch holding the feeding tray onto the high chair. He remained restrained in the seat. Child was repeatedly able to use his toes to disengage the feeding tray latching mechanism found on the underside of the tray. The latch is pushed toward the front of the tray to disengage it.

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108 H0040085A	04/10/2000	11 MO M	Orangeburg, NY	3-point (waist and crotch straps)	Can push tray off. No Injury. TD	Child was secured in high chair and the tray locked in place. He pushed his feet against the tray, it disengaged and fell to the floor. Child remained secured in high chair. The tray will no longer stay locked in place, although there is no visible damage.
109 000519HCC0681 10040241A NEISS No Sample	04/20/2000	6 MO M	Evans Mills, NY	2-point (waist strap)	Disengaged tray. No Injury. TD	Child was not secured in seatbelt at the time of the accident, but the tray was in place. The high chair was borrowed. The mother advised that the locking mechanism on the tray of the high chair was not secure. Her son could disengage it by kicking it with his feet. The owner of the high chair claimed there had never been any problems with the unit.
110 H0050260A	05/15/2000	4 MO M	Yaphank, NY	2-point (waist strap)	Inadequate design. No Injury. O	The product is a wooden convertible infant seat/high chair. The infant seat portion is similar to an adult recliner. Even when the child is secured in the seat there is nothing to prevent the child from falling out the side of the chair. Consumer feels that the seat should be deeper or designed with a 5-point harness.
111 H0050387A	05/22/2000	7 MO M	Martinsville, PA	Unknown	Fell out with strap secured and not tray. Bump on head. R	Secured in high chair by harness strap in a reclined position without the tray. Consumer was sure strap was secure, because she heard it click when she pressed the 2 sides together. While preparing child's food mother heard child scream and turned to find son on the floor.

Document #	Date	Age/Sex	City/State	Type Restraint	Type Hazard Scenario	Narrative
112 H0110424A	06/01/2000	10 MO F	Omaha, NE	Unknown	Wiggled out of restraint. No injury. R	Child was restrained in the high chair when she wiggled out of the restraint strap (unknown how).
113 000720HCC0845 H0070100A No Sample	06/01/2000	10 MO M	Buffalo, NY	3-point (waist and crotch straps) and tray with passive restraint	Able to stand up with restraints secured. No injury. R	Child was able to stand up in his high chair with the waist and crotch straps secured. Complainant said the crotch strap is too long and not adjustable for a snug fit.
114 000616CNE5605 N0060184A N0070076A NEISS	06/15/2000	13 MO M	Patchogue, NY	3-point (waist and crotch straps)	Unrestrained with tray and slipped down. Death. S	The child was placed in the high chair and was not strapped in although the tray was in place. The child slipped down and was discovered with his chin resting on the tray. Likely cause of death was anoxia due to compression of the neck. The chair was in poor condition at a day care location.
115 NEISS	06/30/2000	15 MO F	Unknown	Unknown	Not strapped in. Laceration to lip. RN	Child fell from a high chair to the ground when she wasn't strapped in.
116 H0070119A	07/06/2000	12 MO M	Whiteville, NC	2-point (waist strap)	Tray unlocked and strap came undone. Bump to forehead. TR	Child was sitting in high chair secured by waist strap and leaned forward, causing the tray to unlock. The safety strap came undone and child fell to the floor.

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117 000725HCC3338 H0070132A No Sample	07/13/2000	13 MO M	Berkeley, CA	3-point (waist and crotch straps) and tray with no passive restraint	Able to get out of restraint system and stand up while it was secured. No injury. R	Child was able to get out of the restraint system on three occasions. The system was securely positioned (mother adjusted restraints tighter than the owner's manual recommended), remained fastened and did not loosen. In the first incident the tray was locked in place (unknown about subsequent incidents). Mother even put the child in the high chair one other time to watch how the child got out and he simply pulled himself up and out of the restraints.
118 H0080027A	07/18/2000	12 MO M	Vine Grove, KY	5-point (waist, crotch and shoulder straps)	Tray detached. No injury. TD	Child was secured by restraints when he pushed on the high chair tray's release latch and the tray detached, falling to the floor. The child remained secured in the chair. The latch is underneath the front of the tray.

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119 000915HAA0035 H0090079A No Sample	07/22/2000	9 MO F	East Hanover, NJ	3-point (waist and crotch straps) and no passive restraint	Could wiggle out of restraints and stand up. No injury. R	Three weeks before the incident the child began to wiggle out of the restraints and stand up in the high chair. The child had to be watched constantly because of that. On the day of the incident the restraint was secured at the tightest position. (Complainant stated that even at the tightest position it permitted the child some movement.) The parent went to the pantry and came back to find the child hanging upside down with his feet entangled in the 3-pt restraints over the side of the high chair. It is unknown whether the tray was in use at the time, but parent felt that the tray did not move in far enough to act as a deterrent.
120 10070285A	07/27/2000	8 MO M	Lewisville, TX	Unknown	Tray popped off. No Injury. TD	Child was in his high chair when the tray popped off and would have fallen if the consumer was not there to catch him. This had happened twice with the consumer's older child.
121 H0080252A	08/00/2000	14 MO M	Ringwood, NJ	Unknown	Unlocked tray. No Injury. TD	Child was secured in by the harness and was able to unlock the tray's locking mechanism by pushing against it with his feet. Child remained strapped in and tray fell.
122 NEISS	08/23/2000	10 MO F	Unknown	Unknown	Not strapped in. Forehead contusion. RN	Child fell out of high chair when she was not strapped in.

Document #	Date	Age/Sex	City/State	Type Restraint	Type Hazard Scenario	Narrative
123 10080313A	08/23/2000	13 MO M	Grand Rapids, MI	Unknown	Restraint "bar" cracked and fell off. Child fell. Bruise and bumps above right eye and bruise on chin. B	Mother was removing her child from his high chair and the restraint bar (passive restraint) cracked and fell off, resulting in the child falling to the floor. Bar was on recall and consumer was sent a new one. However, the underside of the tray that connects to the bar is cracking and has broken in a few areas. The consumer is concerned that with the new bar on the tray, it may give out or fall right off the chair.
124 H0080258A	08/25/2000	10 MO M	Mesa, AZ	Unknown	Unrestrained and disengaged the tray. Contusion on top of head. TD	Child was placed in high chair and not secured by the safety restraint belt. He pushed off the tray and fell to the floor.
125 000906HAA2797 10090004A No Sample	08/31/2000	25 MO M	Akron, OH	3-point?	Able to unbuckle and buckle restraint. No injury. U	Father believes that child unbuckled (type of buckle unknown) the waist restraint of the high chair and then buckled it without running the waist strap through the loop in the crotch strap. Because of this his son slid down in the high chair and started choking on the waist restraint. Child was retrieved before he was injured.

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126 000906HCC2798 I0090048A No Sample	09/04/2000	10 MO F	Glasgow, KY	3-point (waist and crotch straps) and tray with a passive restraint.	Restraint assembly came off of the high chair and child fell. Bump on forehead. D	Parent removed the tray of the high chair after the child finished eating. The child leaned forward, the belts loosened and the child fell to the floor sustaining a bump to her forehead. The buckle holding the restraint to the high chair pulled through the slot in the back of the chair. The child still had the restraints around her when she fell.
127 I0110014A 010103HAA2170 Sample #018304435	10/01/2000	23 MO F (Twins)	Huber Heights, OH	3-point (waist and crotch straps)	Can stand up with seatbelt fastened. No Injury. R	Twins (who were born premature) can stand directly up in their high chairs when the seatbelt is securely fastened. In one incident, one twin pulled her legs up and attempted to turn around and stand up in the high chair. The consumer noticed the safety restraint was still buckled, but was falling down the child's hips as she stood. There is no way to make the waist straps any tighter and the restraint appears to be anchored at the lowest center slot on the back of the unit.
128 001012HAA0035 I00A0117A Sample #01-810-3302	10/01/2000	11 MO M	Powder Springs, GA	3-point (waist/crotch straps and waist straps are adjustable).	Wiggled out of restraints and stood up, falling sideways to the floor. No injury. R	Child was in high chair with restraint secured around waist area and tray in place. He wiggled out of the restraint and stood up, falling sideways.

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129 001011HAA0027 H00A0091A Sample #01-810-3103	10/03/2000	16 MO M	Martinsburg, WV	3-point (waist and crotch straps of which only the waist straps are adjustable)	Unbuckled restraint, stood up and fell. No injury. U	Child pushed center release button on buckle of his restraints and stood up. He leaned forward, placing his weight on his hands which he placed on the tray of the high chair. The tray was covered with cake crumbs and icing and his hands slipped at which time he fell, hitting his head on the floor.
130 001016HAA3014 H00A0134A No Sample	10/12/2000	12 MO F	Missoula, MT	2-point (waist straps)	Restraint detached from chair. Bump on forehead. D	Child fell from high chair after parent removed the tray. The nylon restraint straps detached from the back of the chair. Father feels he installed them incorrectly after seeing instructions with replacement straps.
131 I00A0241A	10/18/2000	9 MO M	Beaverton, OR	Unknown	Tray broke off. Bruises on forehead and cheek. B	Child was sitting in high chair and mother heard a noise and saw son fall forward, hitting the kitchen table with his face. The knobs holding the high chair's tray broke off.
132 H00A0324A	10/23/2000	7 MO F	Lansing, MI	Unknown	Tray no longer locked in place. No injury. B	As consumer placed daughter in high chair, she noticed that it not longer clicked to lock. She then realized the plastic support bar (?) beneath the tray was cracked. This prevented it from fitting into the groves that allow the tray to lock.

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133 001102HCC0069 100A0328A No Sample	10/27/2000	13 MO M	Bradenton, FL	3-point (waist and crotch straps)	Pushed tray out and slipped out of restraints, falling. Bruise to right cheek. TR	Over a period several months the tray became loose and the latches (type unknown) on the 3-pt restraint were beginning to unbuckle. The child pushed forward on the high chair tray and it detached. His forward motion then "loosened" the straps according to the complainant and he fell. Caregiver removed the tray, the child leaned forward, and the high chair tipped with the table stopping it from going to the floor. The child was secured in a 3-pt harness where the child sat on the crotch strap extending from the back of the seat. It appears that the waist strap was only looped through the crotch strap and not secured to the chair itself. The buckle was fastened behind the child's back. When the leaned forward and fell, she was suspended upside down.
134 001129HAA3081 100B0193A Sample #018406272	11/13/2000	7 MO F	San Diego, CA	3-point (waist and crotch straps) with no passive restraint	Suspended by restraint upside down. No Injury. H	
135 H00B0278A	11/15/2000	9 MO M	Selkirk, NY	2-point (waist strap)	Pushed against tray and it disengaged. No Injury. TD	Child was secured in high chair by waist strap and the tray was locked into place. Child pushed against the tray, it disengaged and fell to the floor, but child remained strapped in.
136 001130HAA2120 H00B0213A Sample #18304119	11/17/2000	11 MO F	Brecksville, OH	5-point (waist, crotch and shoulder straps)	Secured in restraints and able to stand up. No Injury. R	Though restrained with the tray pushed all the way in, the child was able to stand up and nearly fell over the front of the tray of the high chair. Mother states the restraints can't be tightened enough to prevent the shoulder straps from falling off her daughter.

Document #	Date	Age/Sex	City/State	Type Restraint	Type Hazard Scenario	Narrative
137 001130HAA2118 H00B0290A No Sample	11/28/2000	2 YR M	Crown Point, IN	3-point (waist and crotch straps with a center release buckle) with a passive restraint.	Could operate buckle on harness. No Injury. U	About the second or third time the child was placed in the high chair, he unbuckled the center release buckle of the harness and stood up in the high chair. The child was grabbed by the consumer. The consumer replaced the restraints with a two-point restraint with a squeeze-type latching device by another manufacturer.
138 10110013A	12/00/2000	Unknown	Indianapolis, IN	3-point (waist and crotch straps)	Parts of buckle broke. No Injury. B	The waist straps' plastic "connectors" that meet at the crotch strap broke.
139 H00C0020A 100C0161A 001207HAA2134 Sample #018304120	12/03/2000	12 MO F	North Canton, OH	3-point (waist and crotch straps)	Stood up and fell out. No Injury. R	Child stood up in high chair and fell out as she leaned over the front of the tray. Consumer noticed the seat belt is not adjustable which allows too much mobility. Restraint was a replacement the consumer put on the high chair that was intended for a swing that had a recalled 2-point strap. She received 2 replacement straps from the company. There is also a gap between the child and the feeding tray, which allows her to stand up.
140 10010067A	12/05/2000	1 YR F	LaPlata, MD	Unknown	Detached tray. Bump and bruise. TD	Child pushed on the tray of the high chair. The T-bar (passive restraint?) cracked in half causing the tray and child to fall to the floor. T-bar is attached to tray.
141 NEISS	12/21/2000	2 YR F	Unknown	Unknown	Pushed tray out. Trauma to upper lip and knee. TD	Child in high chair pushed the tray out and fell to the ground.

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142 I0110251A	12/29/2000	8 MO F	Bryan, TX	Unknown	Fell out and began to choke on straps. Scraped neck. H	The child was fastened into the high chair and suddenly fell sideways out of the chair with the straps beginning to choke her. She was caught as she fell. The strap acted as a noose around her neck. Consumer's husband checked the buckle and although it seemed to snap into the fully closed and latched position it doesn't always seem to lock.
143 I0110092A	01/04/2001	16 MO M	Upton, NY	Unknown	Could release tray with feet. No Injury. TD	Child has easily hooked his feet on the tray release handle and sent the tray flying. Now that he's figured it out he attempts to do it often.
144 H0110322A	01/18/2001	6 MO M	Belcamp, MD	Unknown	Kicked tray off. No Injury. TD	Child was secured in the high chair by restraint straps. Consumer locked the tray in place. Later her son kicked the tray and it detached.
145 H0110349A	01/20/2001	6 MO M	Edmond, OK	Unknown	Pulled restraint loose. No Injury. O	Child was in high chair and pulled the restraint strap loose from around his waist (unknown how).
146 H0110340A	01/21/2001	6 MO F	Chicopee, MA	Unknown	Released tray with foot. Bruise on top of forehead. TD	Child was unsecured in high chair with the tray locked on. Daughter's foot hit the release button and the tray came off. The child fell to the floor. Consumer believes that the safety belt is not strong enough to secure the child, even though she was not secured during the incident.