



2018 Concussion Management Survey Results

A survey of a broad array of education professionals on their schools' policies and protocols for students returning to school after sustaining a concussion, their knowledge of concussion management, awareness of state law, and other important issues pertaining to concussion management in an educational setting.



2018 Concussion Management Survey

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Injury Prevention Program

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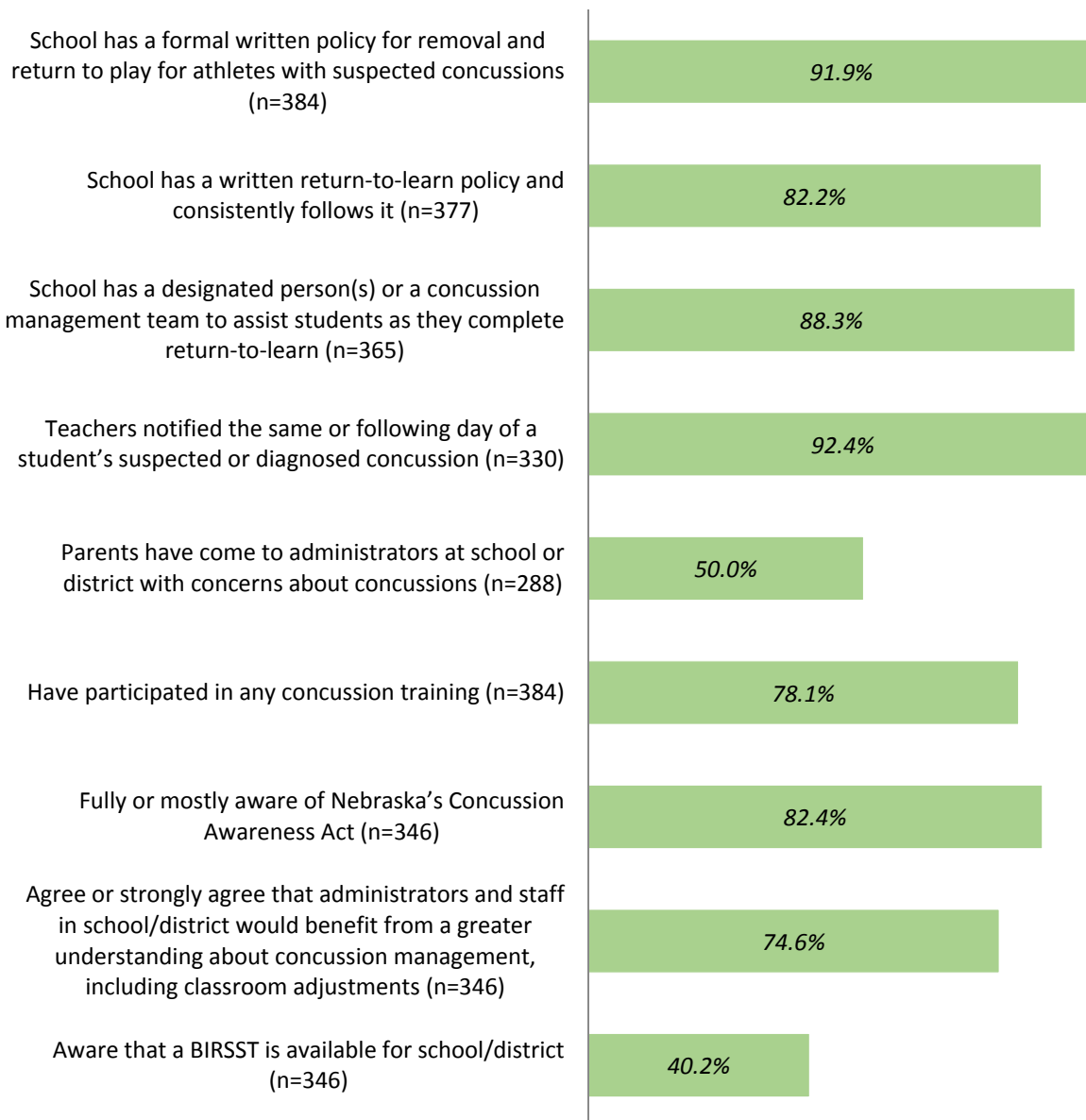
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Executive Summary

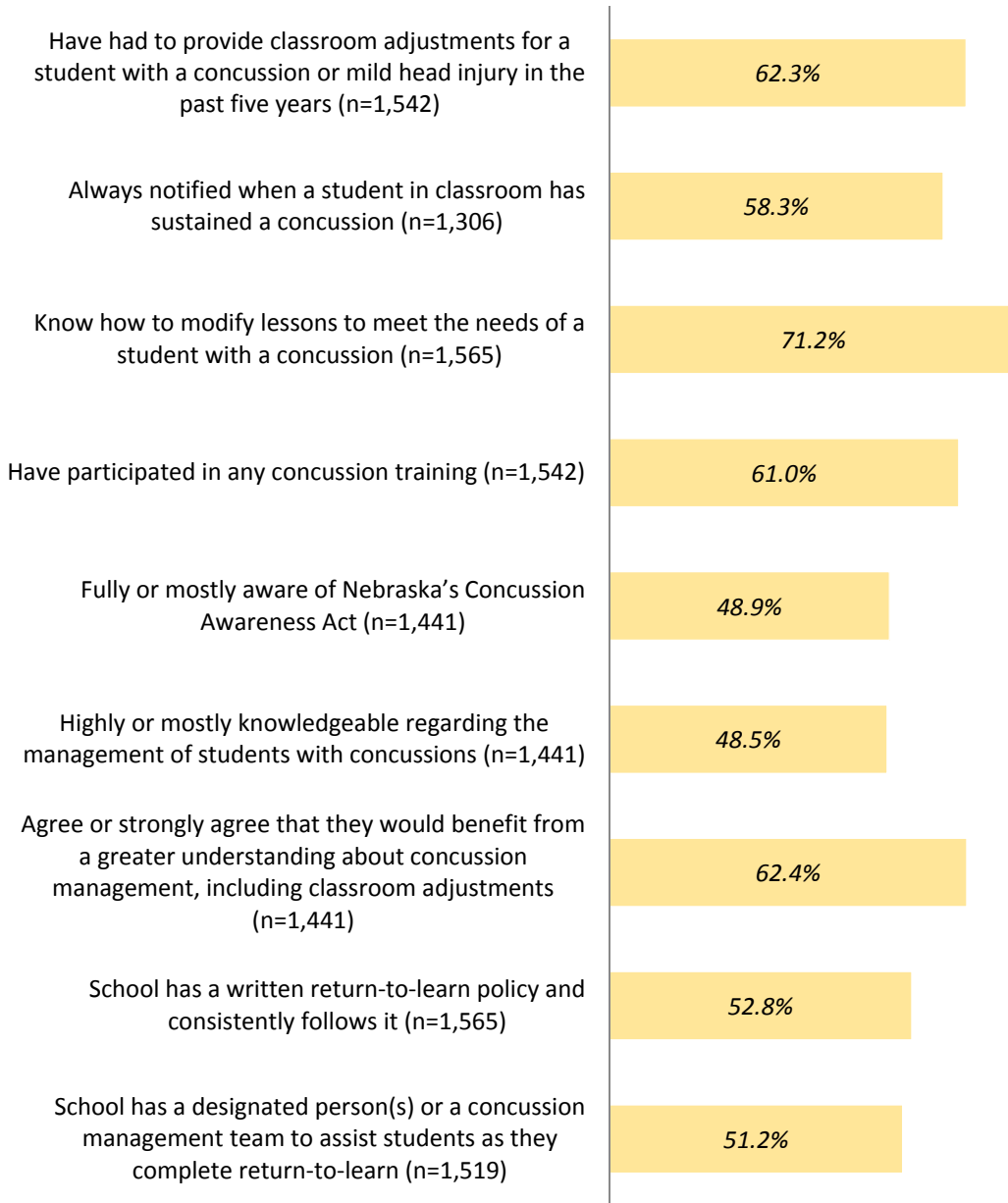
The 2018 Concussion Management Survey, administered in October and November of 2018, is a comprehensive survey of a broad array of school staff designed to evaluate schools' implementation of concussion policies, with a particular focus on the topic of students returning to the classroom after sustaining a concussion ("return-to-learn"). The survey was administered online through four educational associations (NCSA, NSEA, NRCSA, and NASB) and the DHHS School Health Program. Figures 1 and 2 present selected results for school administrators and teachers.

Figure 1. Selected Indicators*: School Administrators



*See Appendix D for definitions of the indicators.

Figure 2. Selected Indicators*: Teachers



*See Appendix D for definitions of the indicators.

Introduction

Background: Nebraska's Concussion Awareness Act

In an attempt to reduce the long-lasting consequences of second-impact concussions, the Nebraska State Legislature enacted the Concussion Awareness Act in 2012 with an amendment in 2014 to address students returning to the classroom after sustaining a concussion. There are five essential components of this law, which are:

- Concussion education training must be made available to all coaches on how to recognize symptoms of a concussion and how to seek proper medical treatment.
- Athletes and parents must be provided with information about concussions prior to an athlete's participation in school sanctioned sports on an annual basis.
- An athlete suspected of having a concussion must be removed from participation and may not return until evaluated by an appropriate licensed health care professional.
- An athlete removed from participation for a suspected concussion must receive written and signed clearance from an appropriate licensed health care professional and from the athlete's parents prior to returning to play.
- Schools must have a policy outlining the protocol for students returning to the classroom after sustaining a concussion (2014 amendment).

The 2018 Concussion Management Survey

In 2018, the Nebraska Department of Health and Human Services Injury Prevention Program supported the 2018 Concussion Management Survey, a comprehensive survey of a broad array of school staff in order to evaluate schools' implementation of concussion policies, with a particular focus on the topic of students returning to the classroom after sustaining a concussion ("return-to-learn"). The 2018 Concussion Management Survey, administered in October and November of 2018, was designed so that each individual responding to the survey would receive a set of questions applicable to their professional role. There are six unique sets of questions to match the six professional groups that were surveyed, which are (1) school administrators; (2) teachers; (3) school counselors, school psychologists, and school social workers; (4) school nurses, (5) presidents of school boards of education; and (6) special education, para-educators, and other staff. Certain survey items are common throughout most or all of the professional groups, whereas others are specific to a limited number of professional groups (or just one group).

The Brain Injury Alliance of Nebraska coordinated efforts with four educational associations (NCSA, NSEA, NRCSA, and NASB) and the DHHS School Health Program to distribute the 2018 Concussion Management Survey to as many elementary, middle school, and high school educators and school staff in Nebraska as possible. With the help of these five partners, as many as 25,000 individuals may have received an opportunity to participate in the survey. In addition, administrators were invited to distribute the survey to as many staff in their building

as they deemed appropriate. Because of this methodology for administering the survey, a precise response rate is unable to be calculated. It is estimated that more than 10% of those who were given an opportunity to participate in the survey responded to the survey.

A Note about “Not Applicable” and “Unknown” Responses

Administrators were given an option to respond “Not Applicable” on many survey items because many of the administrators who were invited to respond to the survey were superintendents or other central office administrators. If they felt that a survey item was better left to an administrator at the building level, they were instructed to respond “Not Applicable.” In addition, certain survey items for other respondents contained the “Not Applicable” response options. All “Not Applicable” responses are counted as missing in the analysis (i.e., are not counted or “hidden”).

Numerous survey items contain the response option “Unknown.” At times, the “Unknown” responses are counted as missing, but at other times they are included in the analysis. If an “Unknown” response seemed to give relevant information, then it was included in the analysis. For example, the percentage of respondents who don’t know if their school has a return-to-learn policy is an important piece of information and not including this in the analysis would give an incomplete picture of return to learn in Nebraska’s schools.

Respondent Demographics

A total of 2,631 individuals responded to the 2018 Concussion Management Survey, with at least one representative from 92 out of 93 counties in Nebraska.

Figures 3 through 7 present respondent demographics.

Figure 3	Urbanicity* (n=2,631)		
Large urban	Small urban	Rural	
39.5%	27.3%	33.3%	

*See Appendix C for a definition of how counties are grouped into urbanicity categories.

Figure 4	Grade level (n=2,631)				
Elementary only	Elementary and middle school	Middle or junior high	Middle/Jr. high and high school	High school	K-12
29.2%	4.4%	9.8%	16.5%	23.4%	16.6%

Figure 5	Class of school for a majority of athletics and activities (among those in a high school setting) (n=1,490)			
Class A	Class B	Class C	Class D	
26.2%	14.7%	30.5%	28.5%	

Figure 6	Respondents who are athletic directors (or activities coordinators) and coaches of school sports (n=2,631)	
% who are athletic directors or activities coordinators	% who are a coach of a school sport	
4.9%	23.6%	

Figure 7		Primary role
		Total number of respondents: 2,631
Administrators	<u>Administrator group total</u>	<u>15.2%</u> <i>(399 respondents)</i>
	Superintendent	5.4%
	Central office administrator (assistant or vice-superintendent, or other such administrator)	1.2%
	Principal	4.7%
	Assistant or vice-principal	1.3%
	Other school administrator (athletic director, activities coordinator, or other administrator)	2.6%
	<u>Teachers</u>	<u>61.5%</u> <i>(1,619 respondents)</i>
School counselors, etc.	<u>School counselor, psychologist, and social worker group total</u>	<u>4.4%</u> <i>(115 respondents)</i>
	School counselor	3.8%
	School psychologist	0.4%
	School social worker	0.2%
	<u>School nurses</u>	<u>2.2%</u> <i>(59 respondents)</i>
Special ed., paras, and other staff	<u>Special ed., paras, and other staff group total</u>	<u>15.3%</u> <i>(402 respondents)</i>
	Special education teacher	6.9%
	Para-educator	2.3%
	Speech language pathologist	1.3%
	Athletic trainer	0.4%
	Other school staff*	4.4%
	<u>School board presidents</u>	<u>1.4%</u> <i>(37 respondents)</i>

*Other school staff include coaches, substitute teachers, librarians, student teachers, and other staff.

Prevalence of Concussions

The majority of teachers reported having at least one student with a concussion in their class each academic year. A fraction (16.7%) reported not knowing how many students with concussions are in their classroom each academic year (Figure 8).

Figure 8	Approximately how many students with concussions are in your classroom each academic year? (i.e., number of students who receive a concussion and need adjustments at school)
	Teachers (n=1,542)
	Unknown 16.7%
	0 23.6%
	1-2 29.4%
	3-4 16.3%
	5-6 8.3%
	7 or more 5.6%

Among administrators, the vast majority reported that they have 10 or fewer students who receive a concussion and need adjustments at school each academic year (Figure 9).

Figure 9	Approximately how many concussions does your return-to-learn program manage each academic year? (i.e., number of students who receive a concussion and need adjustments at school)
	Administrators (n=292)
	Less than 5 55.5%
	6 to 10 30.5%
	11 to 20 8.9%
	21 to 30 1.4%
	31 to 40 1.4%
	41 to 50 0.7%
	Over 50 1.7%

Note: "Not applicable" and "Unknown" responses counted as missing.

The majority (72.4%) of all respondents indicated that 80% or more of concussions managed by their return-to-learn program are a result of sports-related activities.

School nurses (a relatively small group of this survey sample) appear to have a very different perspective from other groups in terms of what percentage of concussions are a result of sports-related activities, with less than half (47.7%) indicating that 80% or more of concussions managed by their return-to-learn program are a result of sports-related activities (Figure 10).

Figure 10						
Approximately what percentage of concussions managed by your return-to-learn program are a result of sports-related activities?						
	Administrators (n=277)	Teachers (n=619)	School Counselors, Psych., and Soc. Workers (n=51)	School Nurses (n=44)	Special Ed., Para- educators and Other Staff (n=91)	Overall (n=1,082)
0%, 10%, or 20%	5.4%	5.2%	3.9%	18.2%	4.4%	5.7%
30%, 40%, or 50%	9.0%	6.9%	11.8%	11.4%	14.3%	8.5%
60% or 70%	15.2%	12.8%	7.8%	22.7%	12.1%	13.5%
80%, 90%, or 100%	70.4%	75.1%	76.5%	47.7%	69.2%	72.4%

Note: "Unknown" responses counted as missing. Administrators responding "Not applicable" also counted as missing. Response options: 0%, 10%, 20%, etc.

Removal and Return to Play

More than two-thirds (68.1%) of administrators reported that coaches or athletic trainers at their school always remove an athlete with a suspected concussion from play. A considerable portion indicated that removal from play happens only “sometimes” (16.7%) or “rarely” (3.5%) (Figure 11).

Figure 11	How often do coaches or athletic trainers at your school remove an athlete with a suspected concussion from play?	
	Administrators (n=342)	
Always	68.1%	
Often	11.7%	
Sometimes	16.7%	
Rarely	3.5%	
Never	0.0%	

Note: “Unknown” and “Not applicable” responses counted as missing.

More than 90% of administrators and school board presidents indicated that their school or district has a formal written policy for removal and return to play for athletes with a suspected concussion. An additional 5.0% indicated that there is no policy, but an informal protocol is in place (Figure 12).

Figure 12	Does your school or district have a formal written policy for removal and return to play for athletes with a suspected concussion?		
	Administrators (n=384)	School Board Presidents (n=35)	Overall (n=419)
Yes	91.9%	91.4%	91.8%
No, but an informal protocol is in place	4.9%	5.7%	5.0%
No policy or informal protocol	0.3%	0.0%	0.3%
Unknown	2.9%	2.9%	2.9%

Return to Learn

There were widely varying perspectives across professions related to return-to-learn policies. Over 80% of administrators and school nurses indicated that their school or district has a return-to-learn policy that provides adjustments for the classroom work of a student athlete with a suspected concussion. However, just over half (52.8%) of teachers reported that their school or district has a return-to-learn policy and nearly one-third (32.9%) did not know. Other profession groups (except for school nurses) had fairly high responses of not knowing whether their school or district has a return-to-learn policy (Figure 13).

Administrators are most likely to have the most accurate information about their schools' policies and protocols. Therefore, it appears that most schools have a policy or at least an informal protocol in place. However, it is clear that not all staff at the school know about their school's policy and protocol for making adjustments to the classroom work of students with suspected concussions.

Figure 13	Does your school or district have a written return-to-learn policy that provides adjustments for the classroom work of a student athlete with a suspected concussion?						
	Administrators (n=377)	Teachers (n=1,565)	School Counselors, Psych., and Soc. Workers (n=110)	School Nurses (n=56)	Special Ed., Para- educators and Other Staff (n=382)	School Board Presidents (n=35)	Overall (n=2,525)
Yes	82.2%	52.8%	68.2%	85.7%	46.3%	62.9%	57.7%
Yes, but the formal policy is not consistently followed	3.2%	4.0%	7.3%	10.7%	3.4%	0.0%	4.0%
No, but an informal protocol is in place	9.3%	6.9%	9.1%	1.8%	4.5%	8.6%	6.9%
No policy or informal protocol	1.1%	3.3%	0.9%	0.0%	2.1%	2.9%	2.6%
Unknown	4.2%	32.9%	14.5%	1.8%	43.7%	25.7%	28.7%

Nearly half (47.7%) of administrators indicated that their school’s return-to-learn protocol is best described as a step-wise process. Again, a high percentage of teachers and other staff (excluding school nurses) reported not knowing the nature of their school’s return-to-learn protocol at fairly high rates (Figure 14).

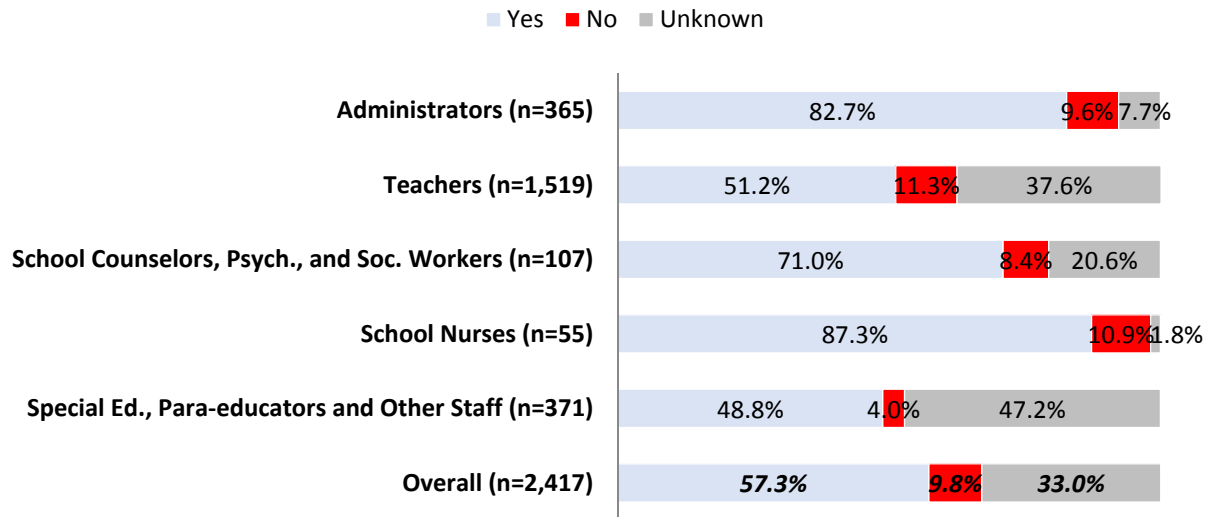
Figure 14	Which of the following best describes your return-to-learn protocol?					
	Administrators (n=377)	Teachers (n=1,565)	School Counselors, Psych., and Soc. Workers (n=110)	School Nurses (n=56)	Special Ed., Para- educators and Other Staff (n=382)	Overall (n=2,490)
Students are put on the return-to-learn protocol when they are injured and then taken off when recovered	43.8%	27.0%	39.1%	44.6%	25.9%	30.3%
Students are gradually returned to full academics using a step-wise process	47.7%	35.4%	32.7%	50.0%	26.4%	36.1%
No protocol	2.4%	4.0%	3.6%	1.8%	1.8%	3.4%
Unknown	6.1%	33.6%	24.5%	3.6%	45.8%	30.2%

Concussion Management

Concussion Management Teams

The majority (82.7%) of administrators reported that their school has a concussion management team. Again, we see the recurring phenomenon that many teachers and other staff (excluding school nurses) do not know about the return-to-learn process in their school (Figure 15).

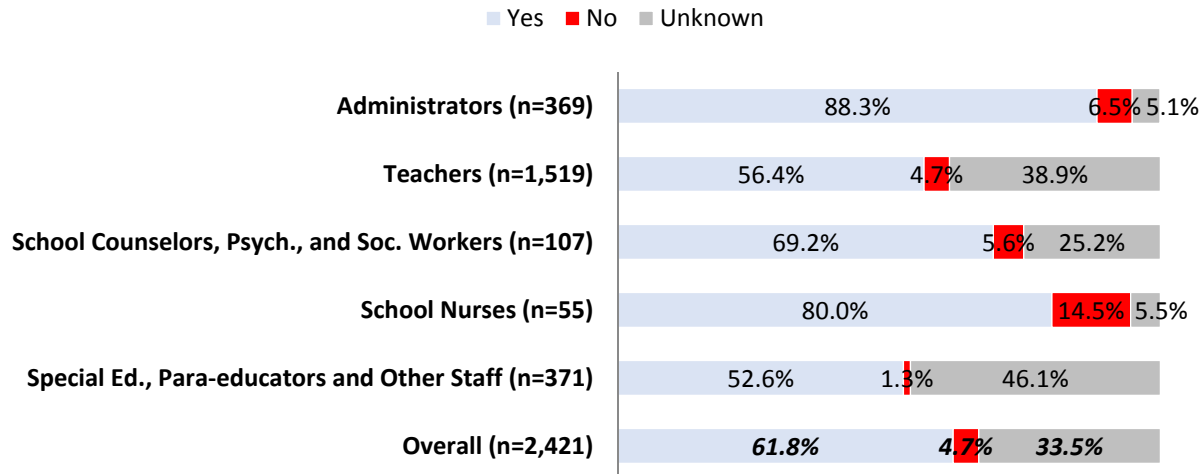
Figure 15. Does your school have a designated person or a concussion management team to assist students as they complete return-to-learn?



Note: Administrators responding "Not applicable" counted as missing.

The vast majority (88.3%) of administrators reported that someone at their school is designated as responsible for communication with the family of students who have sustained a concussion (Figure 16).

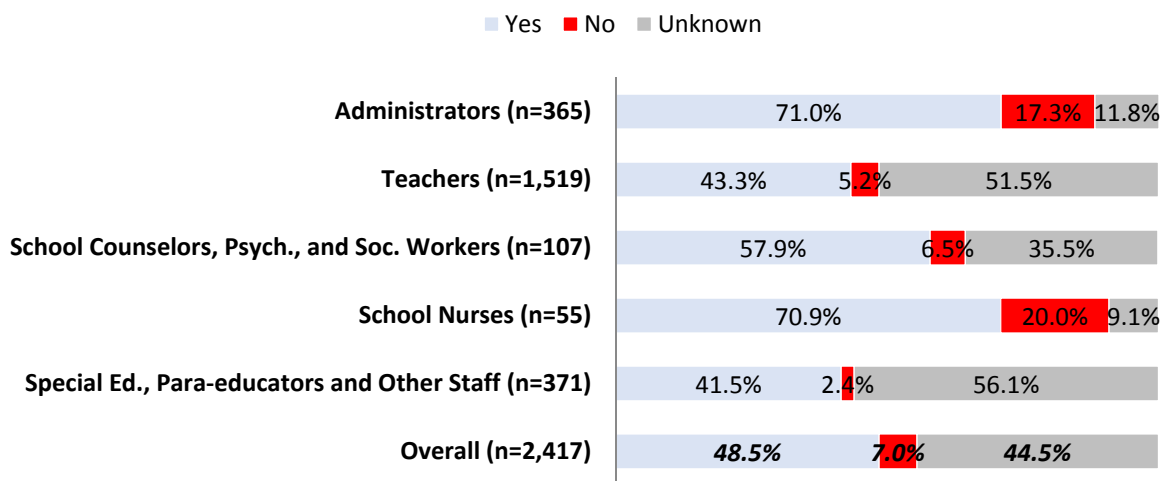
Figure 16. Is someone at your school designated to be responsible for communication with the family of students who have sustained a concussion?



Note: Administrators responding "Not applicable" counted as missing.

A lower percentage of administrators (71.0%) as compared to the previous survey item (see above) indicated that someone at their school is designated as responsible for communication with the medical providers of students who have sustained a concussion (Figure 17).

Figure 17. Is someone at your school designated to be responsible for communication with the medical provider(s) of students who have sustained a concussion?



Note: Administrators responding "Not applicable" counted as missing.

Among those reporting that their school has a concussion management team, school nurses most commonly reported being part of their school’s concussion management team (Figure 18) and this fact is corroborated by other respondents who indicated that that school nurses are most commonly on their school’s concussion management team (Figure 19).

Figure 18. Are you part of the concussion management team? (among those reporting they have a concussion management team)

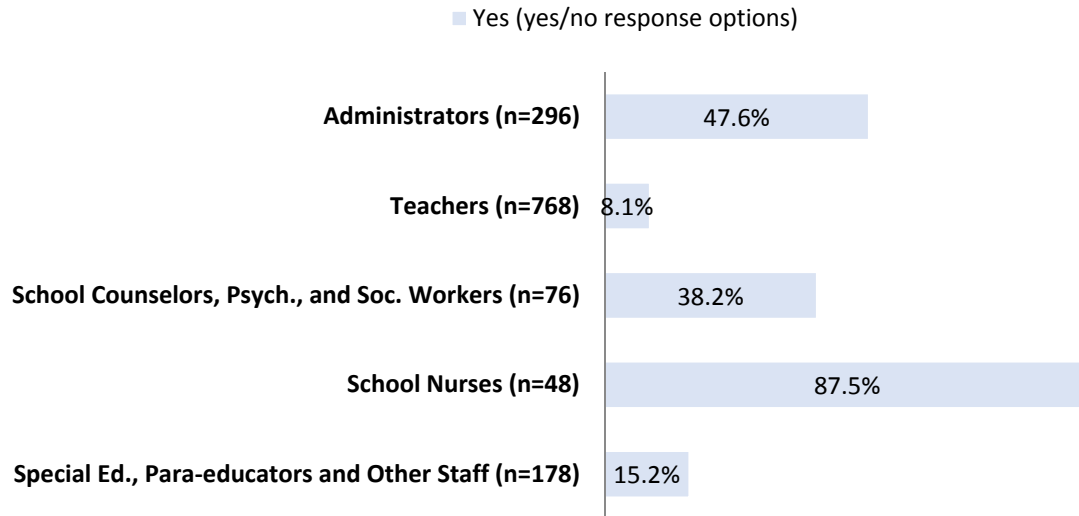
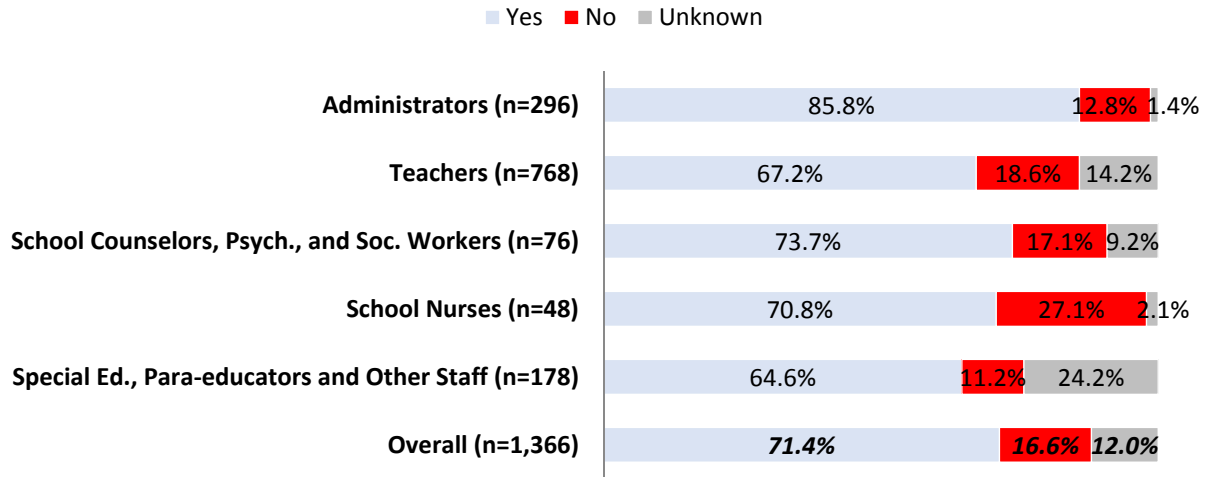


Figure 19		Who is on the concussion management team? (among those reporting they have a concussion management team)				
	Administrators (n=296)	Teachers (n=768)	School Counselors, Psych., and Soc. Workers (n=76)	School Nurses (n=48)	Special Ed., Para-educators and Other Staff (n=178)	Overall (n=2,417)
Unknown	1.0%	13.8%	6.6%	2.1%	19.1%	12.1%
Teacher(s)	51.4%	25.9%	35.5%	47.9%	34.8%	32.0%
School nurse(s)	69.3%	72.0%	81.6%	87.5%	70.8%	72.2%
Athletic trainer(s) ATC	60.1%	46.0%	59.2%	60.4%	47.8%	49.3%
School psychologist, school counselor, and/or school social worker	42.9%	30.7%	44.7%	50.0%	30.3%	33.5%
Others	45.9%	24.0%	31.6%	58.3%	28.7%	29.1%

Note: The vast majority of “other” responses include: administrators (athletic directors, principals, assistant principals, etc.).

The strong majority (85.8%) of administrators whose school has a concussion management team reported that the leader of the team is available in the building full-time (Figure 20).

Figure 20. Is the leader of the concussion management team available in the school building(s) full-time? (among those reporting they have a concussion management team)



Note: Administrators responding "Not applicable" counted as missing.

School administrators and the athletic department were most commonly identified as coordinating the school’s concussion management team by administrators who reported that their school has a concussion management team (Figure 21).

Figure 21	Who coordinates the school’s concussion management team? (multiple responses possible) (among those reporting they have a concussion management team)	
		Administrators (n=296)
	School administrators	63.9%
	Athletic department	55.7%
	General education	9.5%
	Special education	5.7%
	Unknown	3.0%

Overall, over 70% of administrators and teachers whose school has a concussion management team reported that someone on the concussion management team checks in with recovering students on a daily basis (Figure 22).

Figure 22	How frequently does someone on the concussion management team check in with recovering students or have students check in with them? (among those reporting they have a concussion management team)					
	Administrators (n=252)	Teachers (n=380)	School Counselors, Psych., and Soc. Workers (n=40)	School Nurses (n=43)	Special Ed., Para- educators and Other Staff (n=78)	Overall (n=793)
Daily	72.6%	72.1%	52.5%	65.1%	69.2%	70.6%
2-3 times a week	22.6%	19.7%	45.0%	20.9%	24.4%	22.4%
Once a week	4.8%	7.4%	2.5%	11.6%	5.1%	6.3%
Never	0.0%	0.8%	0.0%	2.3%	1.3%	0.6%

Note: “Unknown” responses counted as missing.

Concussion Management and Communication

The vast majority (92.4%) of administrators reported that teachers are notified the same or following day after a student’s suspected or diagnosed concussion. The majority (79.1%) of teachers reported the same. However, 17.2% of teachers reported “within the week” and 3.7% reported “not at all” (Figure 23)

Figure 23	When are teachers usually notified of a student’s suspected or diagnosed concussion?				
	Administrators (n=330)	Teachers (n=1,115)	School Counselors, Psych., and Soc. Workers (n=107)	School Nurses (n=52)	Overall (n=1,604)
Same day	41.8%	33.8%	47.1%	57.7%	37.1%
Following day	50.6%	45.3%	34.1%	32.7%	45.2%
Within the week	7.3%	17.2%	17.6%	9.6%	14.9%
Not at all	0.3%	3.7%	1.2%	0.0%	2.7%

Note: “Unknown” responses counted as missing. Administrators responding “Not applicable” also counted as missing.

Administrators reported that teachers are updated with greater frequency than teachers themselves reported regarding a student’s return-to-learn progress (Figure 24).

Figure 24	How often are teachers typically updated on a student’s progress?				
	Administrators (n=277)	Teachers (n=890)	School Counselors, Psych., and Soc. Workers (n=57)	School Nurses (n=42)	Overall (n=1,266)
Daily	24.2%	21.7%	14.0%	35.7%	22.4%
2-3 times a week	41.5%	28.1%	29.8%	35.7%	31.4%
Once a week	32.1%	34.5%	45.6%	23.8%	34.1%
Never	2.2%	15.7%	10.5%	4.8%	12.2%

Note: “Unknown” responses counted as missing. Administrators responding “Not applicable” also counted as missing.

One-third (33.2%) of teachers who have ever had a student in their classroom with a suspected or diagnosed concussion reported that they never provide updates to other staff at their school about that student. The remaining two-thirds of respondents reported doing so at varying frequencies (Figure 25).

Figure 25	As a teacher of a student with a suspected or diagnosed concussion, how often do you provide updates to other staff at your school (such as a concussion management team or other faculty and staff) about that student? (among those who have ever had a student with a suspected or diagnosed concussion)
	Teachers (n=1,054)
Daily	19.5%
2-3 times a week	20.4%
Once a week	26.9%
Never	33.2%

Note: “Not applicable – I’ve never had a student with a suspected or diagnosed concussion” responses counted as missing.

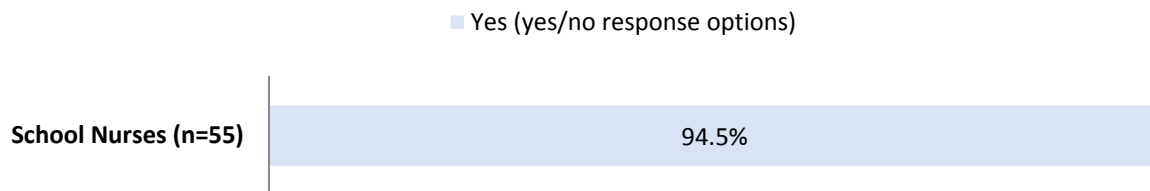
Less than three-fifths (58.3%) of teachers who have ever taught a student who has sustained a concussion reported that they are always notified when a student in their classroom has sustained a concussion.

Figure 26	How often are you notified when a student in your classroom (or a student you serve) has sustained a concussion? [among those who have ever taught or served a student who has sustained a concussion]		
	Teachers (n=1,306)	Special Ed., Para-educators and Other Staff (n=295)	Overall (n=1,601)
Always	58.3%	38.3%	54.6%
Often	17.1%	13.9%	16.5%
Sometimes	9.8%	14.6%	10.7%
Rarely	6.4%	13.2%	7.7%
Never	5.0%	11.2%	6.1%
Unknown	3.5%	8.8%	4.5%

Note: “Not applicable – I’ve never had a student with a concussion in my classroom” or “Not applicable – I’ve never served a student with a concussion” responses counted as missing.

Nearly all (94.5%) of school nurses reported that they do or would be able to provide education or guidance to teachers about individual students with concussions (Figure 27).

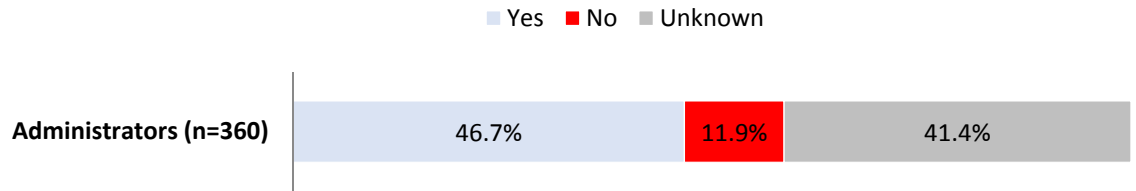
Figure 27. Do you (or would you be able to) as a school nurse provide education or guidance to teachers about individual students with concussions?



Concussion Management Considerations, Modifications, and Adjustments

A notable portion (41.4%) of administrators did not know if anxiety, depression, and other psychiatric disorders are routinely taken into consideration in return-to-learn concussion management (Figure 28).

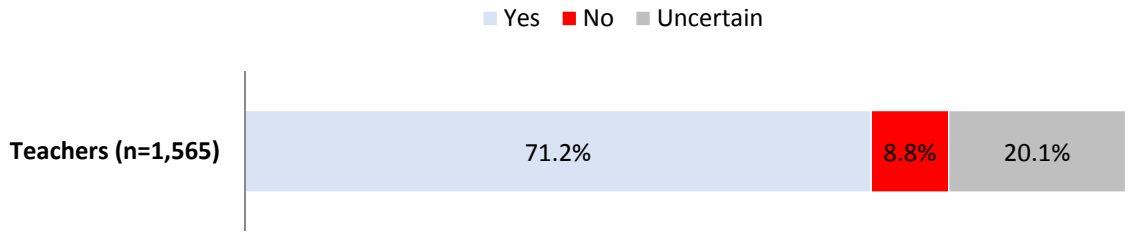
Figure 28. Are anxiety, depression, and other psychiatric disorders routinely taken into consideration in return-to-learn concussion management?



Note: "Unknown" responses counted as missing.

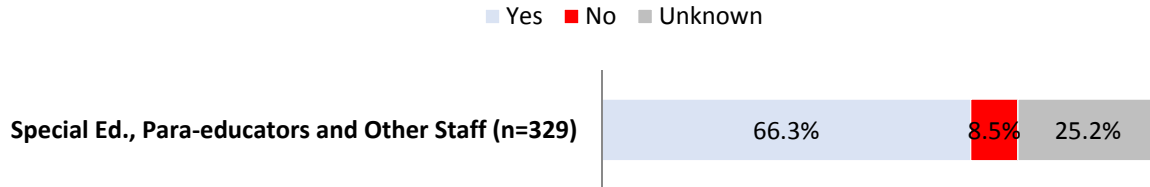
The majority (71.2%) of teachers reported that they know how to modify lessons and/or meet the needs of students who return to their classroom after sustaining a concussion (Figure 29).

Figure 29. If a student returns to your classroom with a concussion, do you know how to modify your lessons and/or meet their needs?



Approximately two-thirds (66.3%) of special education teachers, para-educators and other staff reported that they know how to provide adjustments if a student they serve returns to school after sustaining a concussion (Figure 30).

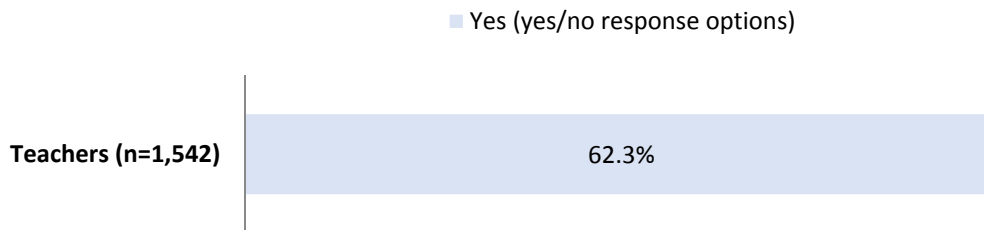
Figure 30. If a student you serve returns to the classroom with a concussion, do you know how to provide adjustments to meet their needs?



Note: "Not applicable" responses counted as missing

More than three-fifths (62.3%) of teachers reported that they have provided classroom adjustments for a student with a concussion or a mild head injury in their classroom in the last five years (Figure 31).

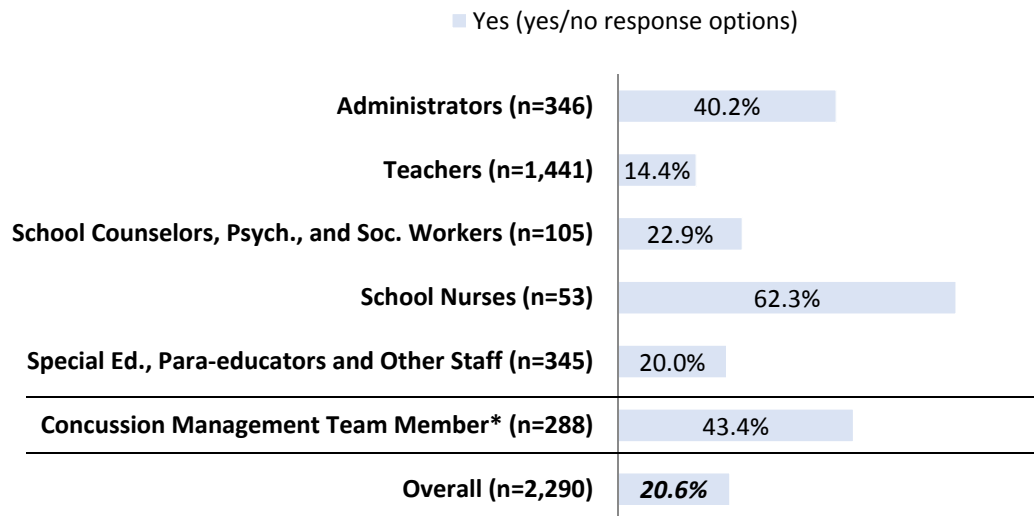
Figure 31. Have you had to provide any adjustments for a student with a concussion or mild head injury in your classroom in the last five years?



Brain Injury Regional School Support Teams (BIRSST)

Awareness of Brain Injury Regional School Support Teams (BIRSST) is relatively low among most school professionals. Two-fifths (40.2%) of administrators reported being aware of BIRSST. Awareness of BIRSST was highest among the school nurses who responded to the survey at 62.3%. Among respondents who identified themselves as a member of a concussion management team, awareness of BIRSST was at 43.4% (Figure 32).

Figure 21. Are you aware that a Brain Injury Regional School Support Team (BIRSST) is available for your school?



*Concussion management team members are a sub-set of one of the above categories.

Concussion Education and Training

The vast majority of administrators (98.1%) reported that concussion training has been made available to coaches. However, just 66.8% reported that it has been made available to teachers, 57.8% to parents, and 74.3% to athletes (Figure 33). Nebraska’s Concussion Awareness Act mandates that concussion education/training be made available to coaches, parents, and athletes.

Figure 33	To whom has your school made concussion education/training available?
	Administrators (n=370)
	0.0%
None	
Teachers	66.8%
Coaches	98.1%
Parents	57.8%
Athletes	74.3%
Health professionals at school (school nurses, certified athletic trainers, or other health professionals)	68.6%

Note: “Unknown” and “Not applicable” responses counted as missing.

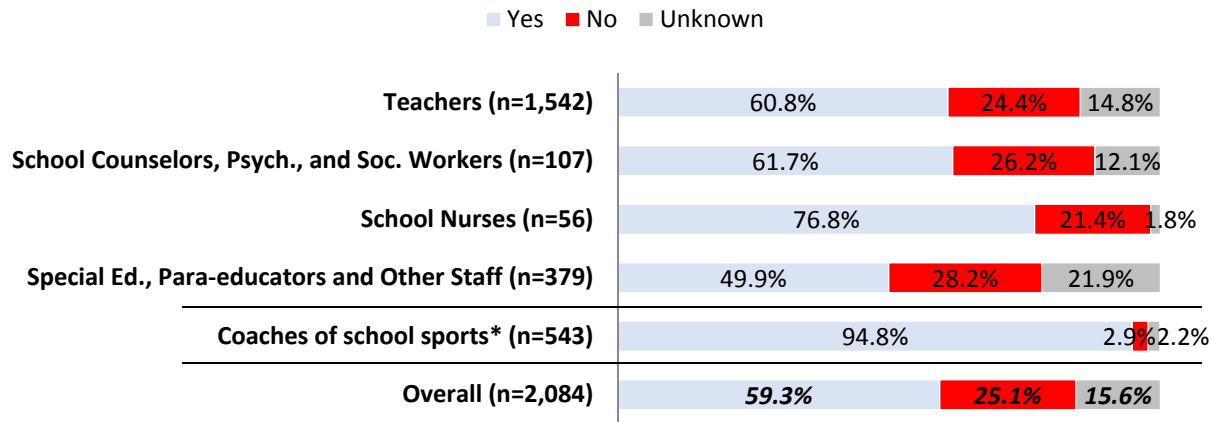
Concussion training/education is not reported as mandatory for most relevant groups by administrators, with the exception of coaches (Figure 34).

Figure 34	For whom was the concussion training/education mandatory?
	Administrators (n=373)
	0.3%
None	
Teachers	25.2%
Coaches	97.1%
Parents	15.0%
Athletes	46.6%
Health professionals at school (school nurses, certified athletic trainers, or other health professionals)	52.0%

Note: “Unknown” and “Not applicable” responses counted as missing.

While nearly all (94.8%) coaches reported that their school has made concussion education/training available to them, approximately three-fifths of teachers and school counselors (along with the small number of school psychologists and social workers) reported that concussion education/training has been made available to them. Three-fourths of school nurses reported that a training or education opportunity has been made available (Figure 35)

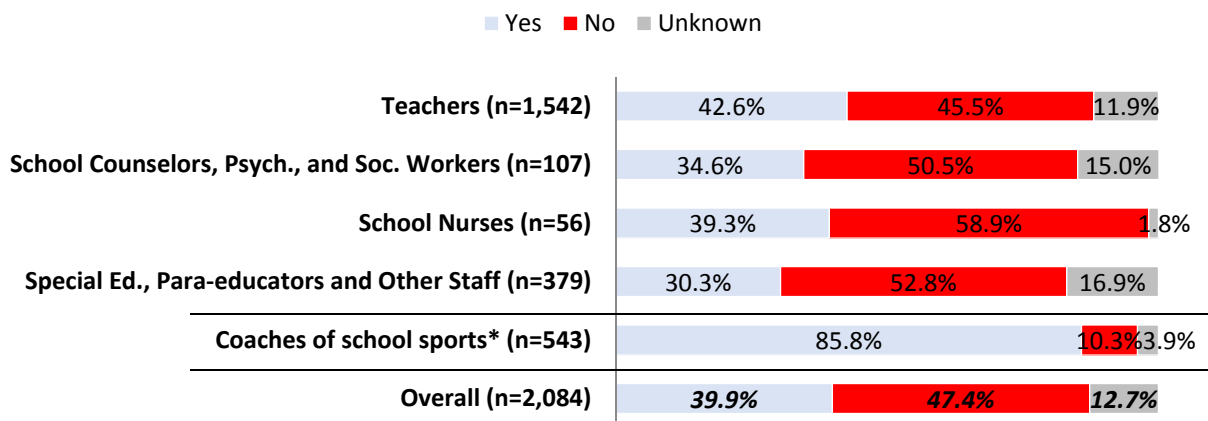
Figure 35. Has your school made concussion education/training available to you?



*Coaches are a sub-set of one of the above categories.

With the exception of coaches, a minority of respondents reported that concussion education/training was mandatory for them (Figure 36).

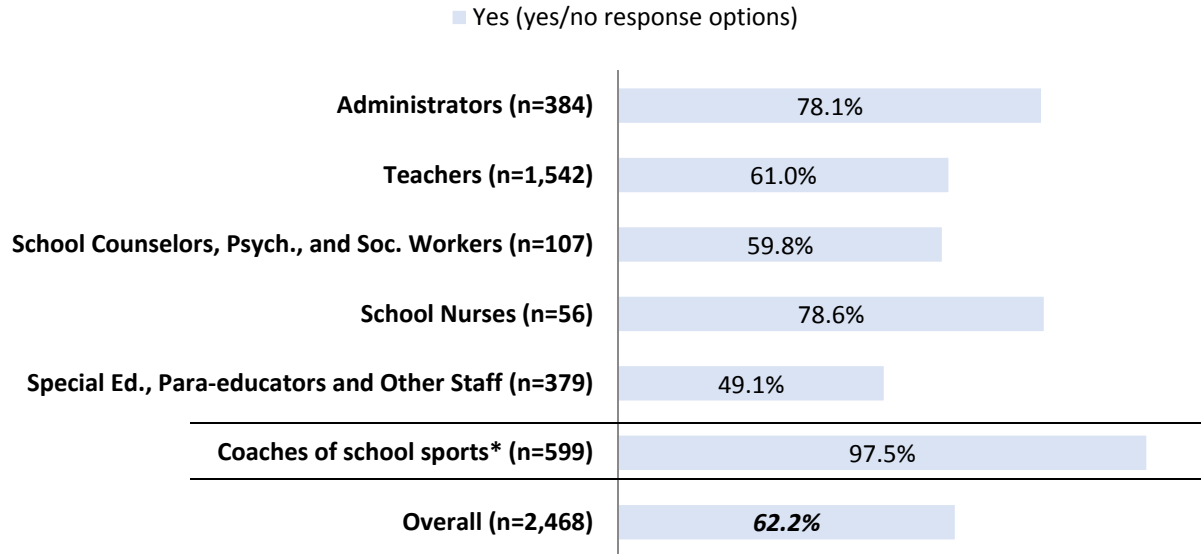
Figure 36. Has your school made concussion education/training mandatory for you?



*Coaches are a sub-set of one of the above categories.

Overall, just over three-fifths (62.2%) of all respondents reported that they have participated in any concussion training. Nearly all (97.5%) of coaches reported participating in training. Approximately four-fifths of administrators and school nurses and three-fifths of teachers and school counselors reported participating in training on concussions (Figure 37).

Figure 37. Have you participated in any concussion training?



*Coaches are a sub-set of one of the above categories.

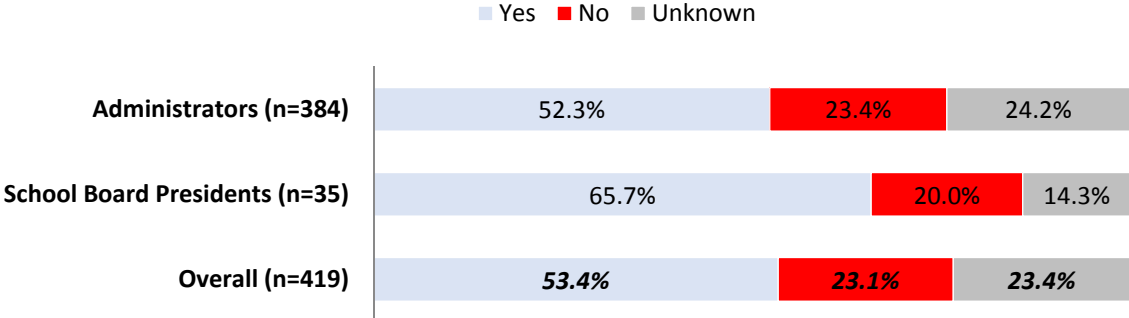
A strong majority (80.2%) of administrators reported that concussion training was made available in the past 12 months at their school (Figure 38).

Figure 38	How recently was concussion training made available in your school or district?
	Administrators (n=359)
Within the past 12 months	80.2%
1-2 years ago	7.8%
2-3 years ago	3.6%
3 or more years ago	8.4%
Never	0.0%

Note: "Unknown" and "Not applicable" responses counted as missing.

Just over half (53.4%) of administrators and school board presidents reported that their school district has information about concussions for parents and students on the district website (Figure 39).

Figure 39. Does your school or district have information about concussions for parents and students on the district website?



General Knowledge and Awareness of Concussions and Nebraska’s Concussion Awareness Act

Prior to being asked about their awareness of Nebraska’s Concussion Awareness Act, respondents were given the key points of the law (the same five bullet points that are included in the Introduction of this report). After reading about the law, respondents were asked to rate their level of awareness with the law prior to having been given the information about it. A relatively high percentage of administrators, school nurses, and school board presidents reported being “fully” or “mostly aware” of the law. However, approximately half of teachers and school counselors reported being “fully” or “mostly aware” aware of the law (Figure 40).

Figure 40	Prior to reading the preceding information [about Nebraska’s Concussion Awareness Act] how would you have rated your level of awareness with Nebraska’s Concussion Awareness Act?						
	Administrators (n=346)	Teachers (n=1,441)	School Counselors, Psych., and Soc. Workers (n=105)	School Nurses (n=53)	Special Ed., Para- educators and Other Staff (n=345)	School Board Presidents (n=34)	Overall (n=2,324)
Fully aware	47.4%	20.3%	14.3%	41.5%	15.1%	32.4%	24.0%
Mostly aware	35.0%	28.6%	39.0%	39.6%	23.2%	41.2%	29.7%
Somewhat aware	13.0%	23.2%	25.7%	13.2%	24.6%	17.6%	21.7%
Not very familiar	2.9%	18.0%	12.4%	1.9%	22.9%	5.9%	15.7%
Not at all familiar	1.7%	9.9%	8.6%	3.8%	14.2%	2.9%	9.0%
% Fully or mostly aware	82.4%	48.9%	53.3%	81.1%	38.3%	73.6%	53.6%

Note: prior to this question, respondents were given the key provisions of Nebraska’s Concussion Awareness Act.

Less than half of teachers perceived themselves as “highly” or “mostly knowledgeable” about the recognition of concussions (Figure 41) and the management of students with concussions (Figure 42).

Figure 41	How would you rate your level of knowledge pertaining to the <u>recognition of concussions</u> ?					
	Administrators (n=346)	Teachers (n=1,441)	School Counselors, Psych., and Soc. Workers (n=105)	School Nurses (n=53)	Special Ed., Para- educators and Other Staff (n=345)	Overall (n=2,290)
Highly knowledgeable	36.1%	19.4%	16.2%	45.3%	14.2%	21.6%
Mostly knowledgeable	41.6%	28.9%	27.6%	39.6%	22.9%	30.1%
Somewhat knowledgeable	16.8%	31.3%	39.0%	13.2%	36.2%	29.8%
Not very knowledgeable	5.2%	16.2%	12.4%	1.9%	19.1%	14.5%
Not at all knowledgeable	0.3%	4.2%	4.8%	0.0%	7.5%	4.0%
% Highly or mostly knowledgeable	77.7%	48.3%	43.8%	84.9%	37.1%	51.7%

Figure 42	How would you rate your level of knowledge pertaining to the <u>management of students with concussions</u> ?					
	Administrators (n=346)	Teachers (n=1,441)	School Counselors, Psych., and Soc. Workers (n=105)	School Nurses (n=53)	Special Ed., Para- educators and Other Staff (n=345)	Overall (n=2,290)
Highly knowledgeable	33.5%	15.3%	13.3%	45.3%	11.6%	18.1%
Mostly knowledgeable	47.7%	33.2%	38.1%	37.7%	26.7%	34.7%
Somewhat knowledgeable	15.6%	29.6%	28.6%	17.0%	29.0%	27.1%
Not very knowledgeable	2.6%	17.3%	15.2%	0.0%	23.2%	15.5%
Not at all knowledgeable	0.6%	4.6%	4.8%	0.0%	9.6%	4.7%
% Highly or mostly knowledgeable	81.2%	48.5%	51.4%	83.0%	38.3%	52.8%

Nearly two-thirds (63.6%) of administrators agreed or strongly agreed that administrators and staff in their school or district would benefit from a greater understanding of Nebraska’s Concussion Awareness Act. Teachers appear to be less enthusiastic about gaining information about state law (just over half agreed or strongly agreed that they would benefit from gaining a greater understanding). The fairly small group of school nurses that responded to the survey appear to be most interested in gaining a greater understanding about the state’s law, with over 70% agreeing or strongly agreeing that they would benefit from gaining a greater understanding of Nebraska’s Concussion Awareness Act (Figure 43).

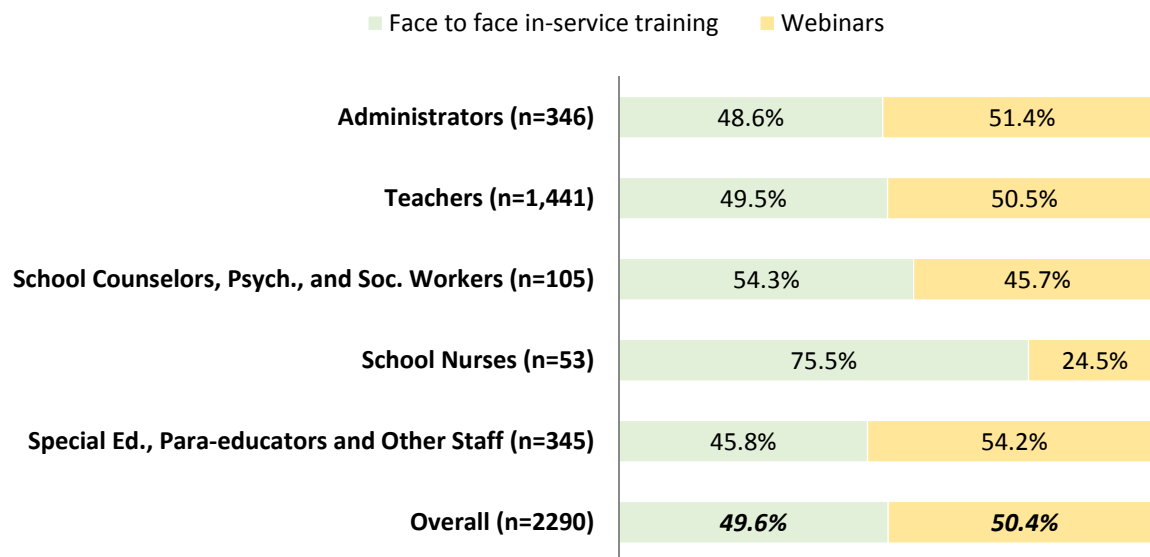
Figure 43	...Would benefit from gaining a greater understanding about <u>Nebraska’s Concussion Awareness Act</u>					
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	% Agree or strongly agree
Administrators: “Administrators and staff in my school/district would benefit...” (n=346)	5.8%	3.2%	27.5%	55.5%	8.1%	63.6%
Teachers: “I would benefit...” (n=1,441)	5.4%	5.6%	36.6%	43.3%	9.1%	52.4%
School Counselors, Psych., and Soc. Workers: “I would benefit...” (n=105)	7.6%	5.7%	24.8%	53.3%	8.6%	61.9%
School Nurses: “I would benefit...” (n=53)	9.4%	3.8%	15.1%	50.9%	20.8%	71.7%
Special Ed., Para-educators and Other Staff: “I would benefit...” (n=345)	4.6%	3.5%	28.4%	51.0%	12.5%	63.5%
School Boards Presidents: “My school board would benefit...” (n=34)	0.0%	11.8%	26.5%	52.9%	8.8%	61.7%
School Boards Presidents: “Teachers and administrators in my school district would benefit...” (n=34)	0.0%	11.8%	32.4%	44.1%	11.8%	55.9%
Overall (n=2,358)	5.4%	5.1%	32.9%	47.0%	9.7%	56.7%

Approximately three-fifths of teachers and three-fourths of administrators, school counselors, and school nurses agreed or strongly agreed that they would benefit from gaining a greater understanding about concussion management, including classroom adjustments (Figure 44).

Figure 44		...Would benefit from gaining a greater understanding about <u>concussion management</u>, including classroom adjustments					
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	% Agree or strongly agree
Administrators: “Administrators and staff in my school/district would benefit...” (n=346)		5.5%	1.4%	18.5%	63.6%	11.0%	74.6%
Teachers: “I would benefit...” (n=1,441)		4.2%	4.7%	28.7%	51.1%	11.3%	62.4%
School Counselors, Psych., and Soc. Workers: “I would benefit...” (n=105)		6.7%	1.9%	16.2%	59.0%	16.2%	75.2%
School Nurses: “I would benefit...” (n=53)		11.3%	3.8%	9.4%	56.6%	18.9%	75.2%
Special Ed., Para-educators and Other Staff: “I would benefit...” (n=345)		2.9%	4.1%	25.2%	53.3%	13.6%	66.9%
Overall (n=2,290)		4.5%	4.0%	25.6%	53.8%	12.0%	65.8%

Respondents were more or less equally divided in terms of their preferred way to receive training, with a near equal proportion indicating face-to-face in-service training as webinars (Figure 45).

Figure 45. What is your preferred way to receive training?



The Effect of Concussions on Students and Families

Approximately 70% of administrators indicated that they are aware of at least one student that is on a 504 or has an IEP (Individualized Education Plan) as a result of the concussion (Figure 46).

Note that there were many “unknown” and “not applicable” responses among respondents to this question. As noted in the introduction, administrators were advised to select “not applicable” if they work at the district-level and felt certain questions were more pertinent to administrators at the building-level.

Figure 46	Approximately how many students with a concussion are on a 504 or have an IEP as a result of the concussion?		
	Administrators (n=191)	School Counselors, Psych., and Soc. Workers (n=48)	Overall (n=239)
0	69.6%	54.2%	66.5%
1	13.6%	20.8%	15.0%
2-3	12.6%	22.9%	14.7%
4-5	2.6%	0.0%	2.1%
More than 5	1.6%	2.1%	1.7%

Note: “Unknown” responses counted as missing. Administrators responding “Not applicable” also counted as missing.

Among those who know of students who have sustained a concussion or a mild head injury, 50.4% indicated that they have observed a decline in academic performance as a result of the injury, 16.2% reported observing classroom behavior issues, and 11.1% observed mental health concerns. A small minority reported observing violent behaviors, involvement with delinquent peers, and involvement in illegal activities. Just under half (48.0%) of those who know of students who have sustained a concussion or mild head injury reported that they have not observed any of these changes in students who have sustained such an injury.

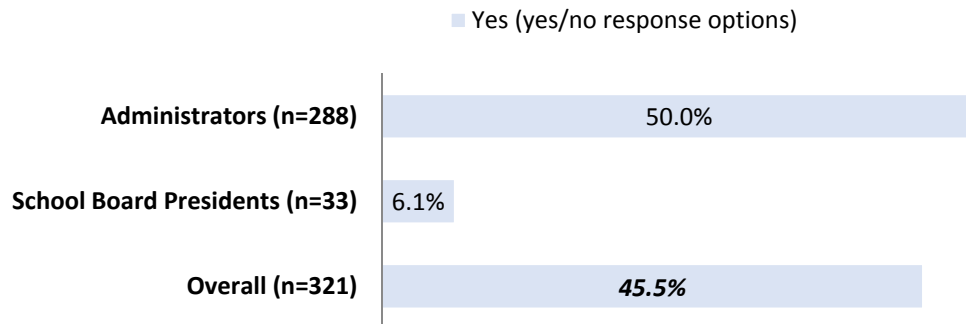
School counselors (along with the small number of school psychologists and social workers) reported observing these issues at higher rates compared to other respondents, likely indicating that such professionals are more likely to encounter students dealing with such issues and behaviors (Figure 47).

Figure 47	Have you observed any of the following changes in students who have sustained a concussion or mild head injury? [among those who know of students who have sustained a concussion or mild head injury]				
	Administrators (n=273)	Teachers (n=1,043)	School Counselors, Psych., and Soc. Workers (n=89)	Special Ed., Para- educators and Other Staff (n=207)	Overall (n=2,314)
Decline in academic performance	49.5%	49.5%	61.8%	51.2%	50.4%
Classroom behavior issues	17.6%	14.0%	24.7%	21.7%	16.2%
Mental health concerns	12.8%	7.9%	23.6%	19.8%	11.1%
Violent behaviors	4.0%	1.2%	9.0%	1.9%	2.2%
Involvement with delinquent peers	2.6%	1.8%	4.5%	4.3%	2.4%
Involvement in illegal activities	1.5%	0.9%	3.4%	1.0%	1.2%
None of the above	48.7%	49.4%	33.7%	45.9%	48.0%

Note: “Not applicable – I am unaware of any students who have sustained a concussion or mild head injury” responses counted as missing. Administrators responding, “Not applicable – my job duties don’t allow for frequent interaction with students counted as missing”.

Exactly half of administrators reported that parents have come to administrators at their school or district with concerns about concussions (Figure 48).

Figure 48. Have parents come to administrators at your school or district OR your school board with concerns about concussion?



Note: administrators were asked if parents have come to administrators with concerns; school board presidents were asked if parents have come to the school board with concerns. “Unknown” responses counted as missing.

Among those administrators who reported that parents have come to administrators at their school or district with concerns about concussions, 79.7% indicated that parents are seeking more supports for their children who have sustained a concussion. Less than one-fourth (22.4%) reported an opposite type of interaction, in which parents are disagreeing with a decision to keep their child from returning to play in athletics after sustaining a concussion (Figure 49).

Figure 49	[Among those indicating that parents have come to administrators or the school board with concerns about concussion] How would you generally describe the nature of their concerns?	
	Administrators (n=143)	School Board Presidents (n=2)
Parents are seeking more supports or modifications for their children who have sustained a concussion, especially in the classroom, and potentially as it relates to school-sanctioned sports	79.7%	-
Parents are disagreeing with a decision to keep their child from returning to play in school-sanctioned sports after sustaining a concussion	22.4%	-
Other	16.1%	-

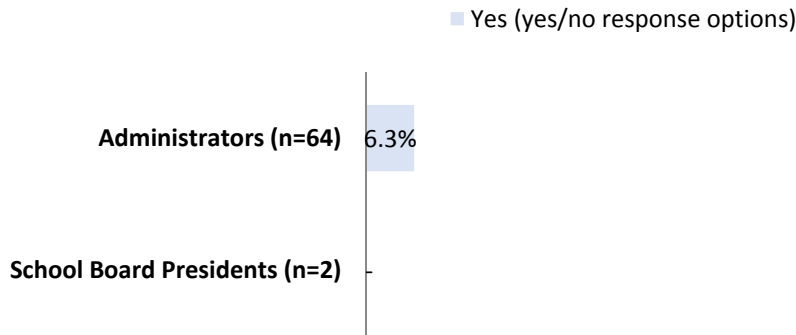
Other responses include: clarification on protocol, more information on concussions, general concern for academics, and other responses.

Note: administrators were asked if parents have come to administrators with concerns; school board presidents were asked if parents have come to the school board with concerns.

Insurance and Liability Issues Related to Concussions

Very few respondents indicated that their insurance carrier offers discounts for having a policy for the return to participation in school sanctioned sports for athletes who have sustained a concussion (Figure 40). Note the small number of respondents to this survey item due to a very high number of respondents indicating “unknown” and who were subsequently not counted in the analysis of this specific survey item.

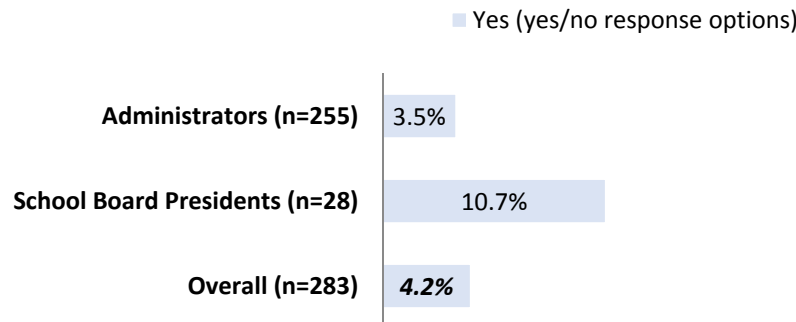
Figure 50. Does your insurance carrier offers discounts for having a policy for the return to participation in school-sanctioned sports for athletes who have sustained a concussion?



Note: “Unknown” responses counted as missing. Results for school board presidents have been masked due to low number of responses after “unknown” responses were removed.

A small handful (4.2%) of administrators and school board presidents reported that their school district has had a liability claim as a result of a concussion sustained by a student or staff member (Figure 51).

Figure 51. Has your school district had any liability claims as a result of a concussion sustained by a student or staff member?



Note: “Unknown” responses counted as missing.

Conclusion

Please note that certain parts of this conclusion discuss findings that differ by the urbanicity (large urban, small urban, and rural) and grade level for which respondents are responsible. See Appendix A for those findings.

❖ ***Respondents report the rather alarming impact that concussions have on students in the classroom.***

- Half (50.4%) of all respondents who know of students who have sustained a concussion reported that they have observed a decline in academic performance in students who have sustained a concussion or mild head injury. Additionally, 16.2% report observing classroom behavior issues and 11.1% report observing mental health concerns among students who have sustained a concussion or mild head injury.
- Half (50.0%) of administrators reported that parents have come to them or other administrators at their school with concerns about concussion. Of those, the considerable majority (79.7%) report that parents are seeking more supports or modifications for their children who have sustained a concussion, especially in the classroom.
- A surprising percentage of administrators and school counselors report having at least one student in their school who sustained a concussion and is on a 504 or IEP as a result of the injury. While approximately half of administrators and school counselors did not know if they have any students on a 504 or IEP as a result of a concussion (and were therefore not included in the analysis of this survey item), among those who knew definitively that they do or do not have such a student, one-third (33.5%) of administrators and school counselors report that there is at least one student at their school on a 504 or IEP as a result of a concussion.

❖ ***The vast majority of schools appear to have a return-to-learn policy (or at least an informal protocol), but many teachers appear not to know about it.***

- A strong majority (82.2%) of administrators report that their school has a written return-to-learn policy and consistently follow it. An additional 9.3% of administrators report that there is no policy, but an informal protocol is in place. On the other hand, just over half (52.8%) of teachers report that their school has a written return-to-learn policy and consistently follow it. Nearly one-in-three (32.9%) teachers do not know if their school has such a policy or not.
- The potential weakness of the return-to-learn policies or protocols in some schools is evidenced by the fact that 58.3% of teachers who have ever taught a student who has sustained a concussion report that they are always notified when a student they teach has sustained a concussion.

❖ ***There appear to be minimal differences between urban and rural schools in terms of concussion management, with the exception that rural teachers are more likely to have received concussion training than their urban peers.***

- An equal proportion (80%) of large urban and rural administrators reported that their school has a return-to-learn policy and consistently follows it. While large urban schools are more likely (non-statistically significant) to have a concussion management team (85.4% among large urban administrators compared to 77.7% among rural administrators), rural administrators reported greater awareness with Nebraska's Concussion Awareness Act as compared to their

large urban peers (87.1% of rural administrators reported that they are “fully” or “mostly aware” of the law compared to 79.1% of urban administrators, non-statistically significant).

- Rural teachers were significantly more likely to have participated in concussion training compared to their large urban peers. Over two-thirds (67.1%) of rural teachers reported that they have participated in concussion training, compared to 55.1% of large urban teachers and 62.2% of small urban teachers. This discrepancy is due to the fact that rural teacher respondents were more than twice as likely to be a coach compared to their large urban counterparts. Nearly all (97.5%) respondents who indicated that they are a coach, reported that they have received training/education on concussions. This also indicates that the training many teachers have received was likely more focused on the recognition of concussions and on-the-field issues and less focused on returning to the classroom after a concussion.
- As a result of being more likely to have received training, rural teachers reported that they are more knowledgeable about concussions than their large urban counterparts at a statistically significant rate, with 53.9% of rural teachers reporting that they are highly or mostly knowledgeable regarding the recognition of concussions, compared to 41.5% for large urban teachers and 52.7% for small urban teachers. Rural teachers were also more likely to report being knowledgeable regarding the management of students with concussions compared to their large urban and small urban peers, though not at a statistically significant rate.

❖ ***Elementary teachers are significantly behind their peers teaching in other grade levels in terms of awareness and knowledge of concussions. At the same time, they are also much less likely to have a student with a concussion in their classroom.***

- Just over half (51.8%) of elementary teachers reported that they know how to modify lessons to meet the needs of a student with a concussion, compared to 73.6% for middle/junior high teachers and 83.5% for high school teachers (statistically significant differences).
- Less than one-third (32.4%) of elementary teachers reported that their school has a written return-to-learn policy and consistently follows it, compared to 54.8% for middle/junior high teachers and 67.9% for high school teachers (statistically significant differences).
- Elementary teachers were also significantly less aware of Nebraska’s Concussion Awareness Act, the recognition of concussions, and the management of students with concussions compared to their peers teaching in other grade levels. For example, 26.2% of elementary teachers reported that they are “highly” or “mostly knowledgeable” regarding the management of students with concussions, compared to 46.7% for middle/junior high teachers, and 63.2% for high school teachers.
- At the same time, just 27.2% of elementary teachers reported that they have had to provide classroom adjustments for a student with a concussion or mild head injury in the past five years, compared to 67.5% for middle/junior high teachers and 86.5% for high school teachers (statistically significant differences).

❖ ***There is a clear need for education/training for teachers on concussion management.***

- Overall, 71.2% of teachers reported that if a student returns to their classroom with a concussion, they know how to modify the lessons to meet their needs. Note the major differences by grade level above.
- Two-fifths (39.0%) of teachers reported that they have not participated in any concussion training.

- Less than half (48.9%) of teachers reported that they are “fully” or “mostly aware” of Nebraska’s Concussion Awareness Act (compared to 82.4% for administrators).
- Less than half (48.5%) of teachers reported that they are “highly” or “mostly knowledgeable” about the management of students with concussions (compared to 81.2% for administrators).

❖ ***School nurses play an important role in concussion management and often are the most knowledgeable about return-to-learn among school staff.***

- Almost all (94.5%) of school nurses indicated that they do (or would be able to) provide education or guidance to teachers about individual students with concussions.
- School nurses were most frequently identified as being on a concussion management team by all respondents. Nearly three-fourths (72.2%) of all respondents whose school has a concussion management team indicated that the school nurse is on the team.
- As noted above, there are many teachers who do not know that their school has a return-to-learn policy. Administrators are assumed to be a reliable source on a school’s return-to-learn policy, and 82.2% indicated that their school has such a policy and consistently follows it. School nurses are the only other professional group who had a similar response as administrators in terms of return-to-learn policy, with 85.7% indicating that their school has such a policy and consistently follows it.
- School nurses reported that they were significantly more knowledgeable than teachers, school counselors, and other staff in terms of Nebraska’s Concussion Awareness Act, the recognition of concussions, and the management of students with concussions. For example, 83.0% of school nurses reported that they are “mostly” or “highly knowledgeable” about the management of students with concussions, compared to 48.5% of teachers, 51.4% of school counselors, and 38.3% of all other staff.

❖ ***Awareness of Brain Injury Regional School Support Teams (BIRSST) is relatively low, even among members of concussion management teams.***

- Among administrators, 40.2% reported that they were aware that a BIRSST is available to their school. The only group that reported more awareness of BIRSST was school nurses at 62.3%. Among the diverse group of respondents who identified that they were on a concussion management team, 43.4% indicated that they were aware that a BIRSST is available for their school.

Appendix A: Profession-Level Indicator Tables

This appendix presents reports of selected indicators for each of the six broad profession groups that participated in the survey. For administrators and teachers, each indicator presented overall, by urbanicity, and by grade level. Due to the small number of respondents for the remaining groups, results are only presented overall without the urbanicity and grade level breakdowns.

See Appendix C for a definition of the three urbanicity categories (large urban, small urban, and rural).

See Appendix D for definitions of the indicators for each profession group.

Administrators

<i>Administrators</i>	Overall	Large Urban	Small Urban	Rural	Elementary Only	Middle/Jr. High*	High School^o	K-12
1. School has a formal written policy for removal and return to play for athletes with suspected concussions	91.9% (n=384)	93.1% (n=101)	93.7% (n=95)	90.4% (n=188)	88.4% (n=43)	96.0% (n=25)	88.4% (n=121)	94.4% (n=195)
2. School has made concussion education/training available to <u>teachers</u>	66.8% (n=370)	72.9% (n=96)	59.8% (n=92)	67.0% (n=182)	54.1% (n=37)	56.5% (n=23)	68.6% (n=118)	69.3% (n=192)
3. School has made concussion education/training available to <u>coaches</u>	98.1% (n=370)	93.8% (n=96)	100% (n=92)	99.5% (n=182)	86.5% (n=37)	100% (n=23)	100% (n=118)	99.0% (n=192)
4. School has made concussion education/training available to <u>parents</u>	57.8% (n=370)	49.0% (n=96)	63.0% (n=92)	59.9% (n=182)	29.7% (n=37)	56.5% (n=23)	68.6% (n=118)	56.8% (n=192)
5. School has made concussion education/training available to <u>athletes</u>	74.3% (n=370)	61.5% (n=96)	83.7% (n=92)	76.4% (n=182)	43.2% (n=37)	65.2% (n=23)	77.1% (n=118)	79.7% (n=192)
6. School has made concussion education/training available to <u>health professionals at school</u>	68.6% (n=370)	80.2% (n=96)	79.3% (n=92)	57.1% (n=182)	81.1% (n=37)	78.3% (n=23)	67.8% (n=118)	65.6% (n=192)
7. School has made concussion education/training mandatory for <u>teachers</u>	25.2% (n=373)	25.3% (n=95)	27.7% (n=94)	23.9% (n=184)	25.6% (n=39)	13.0% (n=23)	22.9% (n=118)	28.1% (n=193)
8. School has made concussion education/training available to <u>coaches</u>	97.1% (n=373)	90.5% (n=95)	100% (n=94)	98.9% (n=184)	79.5% (n=39)	100% (n=23)	99.2% (n=118)	99.5% (n=193)
9. School has made concussion education/training mandatory for <u>parents</u>	15.0% (n=373)	14.7% (n=95)	19.1% (n=94)	13.0% (n=184)	12.8% (n=39)	13.0% (n=23)	18.6% (n=118)	13.5% (n=193)
10. School has made concussion education/training mandatory for <u>athletes</u>	46.6% (n=373)	37.9% (n=95)	56.4% (n=94)	46.2% (n=184)	25.6% (n=39)	43.5% (n=23)	33.9% (n=118)	59.4% (n=193)
11. School has made concussion education/training mandatory for <u>health professionals at school</u>	52.0% (n=373)	75.8% (n=95)	59.6% (n=94)	35.9% (n=184)	66.7% (n=39)	56.5% (n=23)	52.5% (n=118)	48.4% (n=193)
12. Have participated in any concussion training	78.1% (n=384)	78.2% (n=101)	77.9% (n=95)	78.2% (n=188)	74.4% (n=43)	80.0% (n=25)	88.4% (n=121)	72.3% (n=195)
13. Coaches or athletic trainers always remove an athlete with a suspected concussion from play	68.1% (n=342)	72.4% (n=76)	73.3% (n=86)	63.9% (n=180)	52.2% (n=23)	57.9% (n=19)	68.3% (n=120)	71.1% (n=180)

<i>Administrators</i>	Overall	Large Urban	Small Urban	Rural	Elementary Only	Middle/Jr. High*	High School^o	K-12
14. School district has information about concussions for parents and students on the district website	52.3% (n=384)	58.4% (n=101)	52.6% (n=95)	48.9% (n=188)	44.2% (n=43)	48.0% (n=25)	58.7% (n=121)	50.8% (n=195)
15. School has a written return-to-learn policy and consistently follows it	82.2% (n=377)	80.2% (n=101)	88.0% (n=92)	80.4% (n=184)	73.8% (n=42)	75.0% (n=24)	86.7% (n=120)	82.2% (n=191)
16. School has a designated person(s) or a concussion management team to assist students as they complete return-to-learn	82.7% (n=365)	85.4% (n=96)	90.0% (n=90)	77.7% (n=179)	68.3% (n=41)	75.0% (n=24)	84.7% (n=118)	85.7% (n=182)
17. School has a designated person responsible for communication with the <u>family</u> of students who have sustained a concussion	88.3% (n=369)	88.8% (n=98)	89.9% (n=89)	87.4% (n=182)	78.6% (n=42)	91.7% (n=24)	89.8% (n=118)	89.2% (n=185)
18. School has a designated person responsible for communication with the <u>medical provider(s)</u> of students who have sustained a concussion	71.0% (n=365)	76.3% (n=97)	71.6% (n=88)	67.8% (n=180)	61.9% (n=42)	78.3% (n=23)	71.6% (n=116)	71.7% (n=184)
19. Leader of the concussion management team is available in the school building full-time	85.8% (n=296)	85.0% (n=80)	78.8% (n=80)	90.4% (n=136)	60.0% (n=25)	70.6% (n=17)	88.9% (n=99)	89.7% (n=155)
20. Someone on the concussion management team checks in with recovering students at least 2-3 times per week	95.2% (n=252)	92.1% (n=63)	95.5% (n=66)	96.7% (n=123)	100% (n=18)	92.3% (n=13)	95.4% (n=86)	94.9% (n=135)
21. Teachers notified the same or following day of a student's suspected or diagnosed concussion	92.4% (n=330)	87.0% (n=85)	95.3% (n=85)	93.7% (n=160)	100% (n=29)	95.5% (n=22)	91.1% (n=113)	91.6% (n=166)
22. Teachers updated on a student's progress at least 2-3 times per week	65.7% (n=277)	61.8% (n=68)	67.2% (n=67)	66.9% (n=142)	81.8% (n=22)	63.1% (n=19)	57.1% (n=98)	69.6% (n=138)
23. Parents have come to administrators at school or district with concerns about concussions	50.0% (n=288)	60.6% (n=71)	55.2% (n=67)	42.7% (n=150)	52.4% (n=21)	61.1% (n=18)	51.0% (n=98)	47.7% (n=151)
24. Fully or mostly aware of Nebraska's Concussion Awareness Act	82.4% (n=346)	79.2% (n=91)	76.5% (n=85)	87.1% (n=170)	50.0% (n=36)	76.2% (n=21)	83.3% (n=114)	89.1% (n=175)

<i>Administrators</i>	Overall	Large Urban	Small Urban	Rural	Elementary Only	Middle/Jr. High*	High School^o	K-12
25. Highly or mostly knowledgeable regarding the <u>recognition of concussions</u>	77.7% <i>(n=346)</i>	71.5% (n=91)	76.5% (n=85)	81.8% (n=170)	58.3% (n=36)	71.4% (n=21)	85.0% (n=114)	77.7% (n=175)
26. Highly or mostly knowledgeable regarding the <u>management of students with concussions</u>	81.2% <i>(n=346)</i>	75.9% (n=91)	80.0% (n=85)	84.7% (n=170)	55.5% (n=36)	76.2% (n=21)	90.4% (n=114)	81.1% (n=175)
27. Agree or strongly agree that administrators and staff in school/district would benefit from a greater understanding about <u>Nebraska's Concussion Awareness Act</u>	63.6% <i>(n=346)</i>	61.5% (n=91)	63.5% (n=85)	64.7% (n=170)	75.0% (n=36)	57.2% (n=21)	60.5% (n=114)	61.0% (n=175)
28. Agree or strongly agree that administrators and staff in school/district would benefit from a greater understanding about <u>concussion management, including classroom adjustments</u>	74.6% <i>(n=346)</i>	73.6% (n=91)	75.3% (n=85)	74.7% (n=170)	83.2% (n=36)	66.7% (n=21)	73.7% (n=114)	74.3% (n=175)
29. Aware that a BIRSST is available for school/district	40.2% <i>(n=346)</i>	52.7% (n=91)	27.1% (n=85)	40.0% (n=170)	33.3% (n=36)	38.1% (n=21)	36.0% (n=114)	44.6% (n=175)

*"Middle/Jr. High" includes two groups: (1) Middle or Junior High only and (2) Elementary and Middle School.

^o"High School" includes two groups: (1) High School only and (2) Middle/Junior High and High School.

Teachers

<i>Teachers</i>	Overall	Large Urban	Small Urban	Rural	Elementary Only	Middle/Jr. High*	High School^b	K-12
1. Always notified when a student in classroom has sustained a concussion	58.3% (n=1,306)	61.9% (n=549)	55.1% (n=325)	56.0% (n=432)	51.5% (n=332)	59.4% (n=219)	61.8% (n=673)	53.7% (n=82)
2. Know how to modify lessons to meet the needs of a student with a concussion	71.2% (n=1,565)	70.3% (n=664)	70.6% (n=391)	72.7% (n=510)	51.8% (n=521)	73.6% (n=250)	83.5% (n=698)	80.2% (n=96)
3. School has a written return-to-learn policy and consistently follows it	52.8% (n=1,565)	53.9% (n=664)	48.8% (n=391)	54.5% (n=510)	32.4% (n=169)	54.8% (n=250)	67.9% (n=698)	49.0% (n=96)
4. School has made concussion education/training available	60.8% (n=1,542)	54.7% (n=651)	57.8% (n=386)	71.1% (n=505)	40.1% (n=514)	60.2% (n=246)	74.6% (n=688)	75.5% (n=94)
5. Have participated in any concussion training	61.0% (n=1,542)	55.5% (n=651)	62.2% (n=386)	67.1% (n=505)	41.2% (n=514)	57.7% (n=246)	74.7% (n=688)	76.6% (n=94)
6. School has made concussion education/training mandatory	42.6% (n=1,542)	35.3% (n=651)	47.7% (n=386)	48.1% (n=505)	23.5% (n=514)	41.1% (n=246)	55.5% (n=688)	56.4% (n=94)
7. Coach a school sport	29.8% (n=1,619)	18.5% (n=688)	34.6% (n=408)	40.9% (n=523)	10.0% (n=549)	29.3% (n=259)	41.5% (n=714)	56.7% (n=97)
8. Have had to provide classroom adjustments for a student with a concussion or mild head injury in the past five years	62.3% (n=1,542)	63.1% (n=651)	62.7% (n=386)	61.0% (n=505)	27.2% (n=514)	67.5% (n=246)	86.5% (n=688)	63.8% (n=94)
9. School has a designated person(s) or a concussion management team to assist students as they complete return-to-learn	51.2% (n=1,519)	57.9% (n=642)	44.6% (n=381)	47.4% (n=496)	38.9% (n=504)	52.9% (n=244)	60.6% (n=681)	43.3% (n=90)
10. Leader of the concussion management team is available in the school building full-time	67.2% (n=516)	69.2% (n=370)	64.7% (n=167)	65.8% (n=231)	57.1% (n=191)	59.7% (n=129)	73.6% (n=409)	74.4% (n=39)
11. Someone on the concussion management team checks in with recovering students at least 2-3 times per week	91.8% (n=380)	91.7% (n=180)	91.0% (n=89)	92.8% (n=111)	93.5% (n=77)	82.5% (n=63)	89.8% (n=217)	100% (n=23)
12. Teachers notified the same or following day of a student's suspected or diagnosed concussion	79.1% (n=1,115)	80.3% (n=458)	76.2% (n=278)	79.6% (n=379)	89.9% (n=267)	79.2% (n=192)	73.8% (n=589)	82.1% (n=67)

<i>Teachers</i>	Overall	Large Urban	Small Urban	Rural	Elementary Only	Middle/Jr. High*	High School^o	K-12
13. Teachers updated on a student's progress at least 2-3 times per week	49.8% <i>(n=890)</i>	54.2% (n=374)	48.6% (n=220)	44.9% (n=296)	71.3% (n=174)	54.6% (n=150)	41.3% (n=511)	47.3% (n=55)
14. Teachers provide updates to other staff at school regarding the progress of a student with a concussion at least 2-3 times per week	39.9% <i>(n=1,054)</i>	39.8% (n=438)	39.8% (n=269)	40.3% (n=347)	67.1% (n=179)	40.9% (n=188)	31.7% (n=616)	40.8% (n=71)
15. Fully or mostly aware of Nebraska's Concussion Awareness Act	48.9% <i>(n=1,441)</i>	46.7% (n=605)	46.3% (n=363)	53.7% (n=473)	29.2% (n=470)	47.1% (n=229)	63.0% (n=654)	54.5% (n=88)
16. Highly or mostly knowledgeable regarding the recognition of concussions	48.3% <i>(n=1,441)</i>	41.5% (n=605)	52.7% (n=363)	53.9% (n=473)	29.3% (n=470)	46.7% (n=229)	60.4% (n=654)	64.8% (n=88)
17. Highly or mostly knowledgeable regarding the management of students with concussions	48.5% <i>(n=1,441)</i>	45.9% (n=605)	49.1% (n=363)	51.3% (n=473)	26.2% (n=470)	47.6% (n=229)	63.2% (n=654)	61.4% (n=88)
18. Agree or strongly agree that they would benefit from a greater understanding about <u>Nebraska's Concussion Awareness Act</u>	52.4% <i>(n=1,441)</i>	52.3% (n=605)	58.2% (n=363)	48.2% (n=473)	59.2% (n=470)	54.6% (n=229)	46.3% (n=654)	55.7% (n=88)
19. Agree or strongly agree that they would benefit from a greater understanding about <u>concussion management, including classroom adjustments</u>	62.4% <i>(n=1,441)</i>	76.6% (n=605)	64.1% (n=363)	63.8% (n=473)	65.5% (n=470)	66.4% (n=229)	58.0% (n=654)	68.2% (n=88)
20. Aware that a BIRSST is available for school/district	14.4% <i>(n=1,441)</i>	17.9% (n=605)	12.9% (n=363)	11.0% (n=473)	10.6% (n=470)	15.3% (n=229)	16.8% (n=654)	13.6% (n=88)

*"Middle/Jr. High" includes two groups: (1) Middle or Junior High only and (2) Elementary and Middle School.

^o"High School" includes two groups: (1) High School only and (2) Middle/Junior High and High School.

School Counselors, Psychologists, and Social Workers

<i>School Counselors, Psychologists, and Social Workers</i>	Overall
1. School has a written return-to-learn policy and consistently follows it	68.2% (n=110)
2. School has made concussion education/training available	61.7% (n=107)
3. Have participated in any concussion training	59.8% (n=107)
4. School has made concussion education/training mandatory	34.6% (n=107)
5. School has a designated person(s) or a concussion management team to assist students as they complete return-to-learn	71.0% (n=107)
6. Leader of the concussion management team is available in the school building full-time	73.7% (n=76)
7. Someone on the concussion management team checks in with recovering students at least 2-3 times per week	97.5% (n=40)
8. Teachers notified the same or following day of a student's suspected or diagnosed concussion	81.2% (n=85)
9. Teachers updated on a student's progress at least 2-3 times per week	43.8% (n=57)
10. Fully or mostly aware of Nebraska's Concussion Awareness Act	53.3% (n=105)
11. Highly or mostly knowledgeable regarding the <u>recognition of concussions</u>	43.8% (n=105)
12. Highly or mostly knowledgeable regarding the <u>management of students with concussions</u>	51.4% (n=105)
13. Agree or strongly agree that they would benefit from a greater understanding about <u>Nebraska's Concussion Awareness Act</u>	61.9% (n=105)
14. Agree or strongly agree that they would benefit from a greater understanding about <u>concussion management, including classroom adjustments</u>	75.2% (n=105)
15. Aware that a BIRSST is available for school/district	22.9% (n=105)

School Nurses

<i>School Nurses</i>	Overall
1. School has a written return-to-learn policy and consistently follows it	85.7% (n=56)
2. School has made concussion education/training available	76.8% (n=56)
3. Have participated in any concussion training	78.6% (n=56)
4. School has made concussion education/training mandatory	39.3% (n=56)
5. School has a designated person(s) or a concussion management team to assist students as they complete return-to-learn	87.3% (n=55)
6. Leader of the concussion management team is available in the school building full-time	70.8% (n=48)
7. Someone on the concussion management team checks in with recovering students at least 2-3 times per week	86.0% (n=43)
8. Teachers notified the same or following day of a student's suspected or diagnosed concussion	90.4% (n=52)
9. Teachers updated on a student's progress at least 2-3 times per week	71.4% (n=42)
10. Able to provide education or guidance to teachers about individual students with concussions	94.5% (n=55)
11. Fully or mostly aware of Nebraska's Concussion Awareness Act	81.1% (n=53)
12. Highly or mostly knowledgeable regarding the <u>recognition of concussions</u>	84.9% (n=53)
13. Highly or mostly knowledgeable regarding the <u>management of students with concussions</u>	83.0% (n=53)
14. Agree or strongly agree that they would benefit from a greater understanding about <u>Nebraska's Concussion Awareness Act</u>	71.7% (n=53)
15. Agree or strongly agree that they would benefit from a greater understanding about <u>concussion management, including classroom adjustments</u>	75.5% (n=53)
16. Aware that a BIRSST is available for school/district	62.3% (n=53)

Special Education, Para-educators, and Other Staff

<i>Special Education, Para-Educators, and Other Staff</i>	Overall
1. Always notified when a student in classroom has sustained a concussion	38.3% <i>(n=113)</i>
2. Know how to provide adjustments to meet the needs of a student with a concussion	66.3% <i>(n=329)</i>
3. School has a written return-to-learn policy and consistently follows it	46.3% <i>(n=382)</i>
4. School has made concussion education/training available	49.9% <i>(n=379)</i>
5. Have participated in any concussion training	49.1% <i>(n=379)</i>
6. School has made concussion education/training mandatory	30.3% <i>(n=379)</i>
7. School has a designated person(s) or a concussion management team to assist students as they complete return-to-learn	48.8% <i>(n=371)</i>
8. Leader of the concussion management team is available in the school building full-time	64.6% <i>(n=178)</i>
9. Someone on the concussion management team checks in with recovering students at least 2-3 times per week	93.6% <i>(n=78)</i>
10. Fully or mostly aware of Nebraska's Concussion Awareness Act	38.3% <i>(n=345)</i>
11. Highly or mostly knowledgeable regarding the <u>recognition of concussions</u>	37.1% <i>(n=345)</i>
12. Highly or mostly knowledgeable regarding the <u>management of students with concussions</u>	38.3% <i>(n=345)</i>
13. Agree or strongly agree that they would benefit from a greater understanding about <u>Nebraska's Concussion Awareness Act</u>	63.5% <i>(n=345)</i>
14. Agree or strongly agree that they would benefit from a greater understanding about <u>concussion management, including classroom adjustments</u>	66.9% <i>(n=345)</i>
15. Aware that a BIRSST is available for school/district	20.0% <i>(n=345)</i>

School Board Presidents

<i>School Board Presidents</i>	Overall
1. School district has information about concussions for parents and students on the district website	65.7% <i>(n=35)</i>
2. All schools offering school-sanctioned athletics in district have a formal written policy for removal and return to play for athletes with suspected concussions	91.4% <i>(n=35)</i>
3. All schools in the district have a written return-to-learn policy and consistently follows it	62.9% <i>(n=35)</i>
4. Parents have come to administrators at school or district with concerns about concussions	6.1% <i>(n=33)</i>
5. Fully or mostly aware of Nebraska's Concussion Awareness Act	73.6% <i>(n=34)</i>
6. Agree or strongly agree that <u>school board</u> in school/district would benefit from a greater understanding about Nebraska's Concussion Awareness Act	61.7% <i>(n=34)</i>
7. Agree or strongly agree that teachers and administrators in school/district would benefit from a greater understanding about <u>Nebraska's Concussion Awareness Act</u>	55.9% <i>(n=34)</i>

Appendix D: Athletic Directors and Activities' Coordinators Trends

In three previous surveys, high school athletic directors and activities coordinators were surveyed on the topic of concussions. A total of seven survey items are comparable across surveys conducted in 2013 to 2018 and are presented in Figure D1 below. Note that there was a low number of athletic directors who responded to the survey in 2018 compared to previous years. In the 2016 Concussion Management Survey, 90.8% of all athletic directors responded to the survey.

Figure D1	Comparison of survey items among athletic directors and activities' coordinators: 2013 – 2018			
	2013	2015	2016	2018
Number of respondents	164	261	276	130
1. School has a formal written policy for removal and return to play for athletes with a suspected concussion	63.2%	74.3%	90.6%	86.7%
2. School has a written return-to-learn policy that provides accommodations for the classroom work of students with a suspected concussion	6.1%	70.8%	83.9%	84.8%
3. School has made concussion education/training available to coaches	93.9%	99.6%	100%	100%
4. School has made concussion education/training available to teachers	32.5%	71.6%	70.5%	68.9%
5. Concussion training/education is mandatory for coaches	77.1%	95.7%	99.3%	98.9%
6. Coaches or athletic trainers always remove an athlete with a suspected concussion from play	75.5%	81.8%	87.6%	70.8%
7. School has a designated person(s) to assist students as they complete return-to-learn	34.4%	60.0%	62.5%	73.4%

Appendix C: Urbanicity Definitions

The urbanicity definitions (large urban, small urban, and rural) were created by Nebraska DHHS. The three broad urbanicity categories defined below by grouping different metropolitan, micropolitan, and non-metropolitan classifications.

Large Urban

- *Core metropolitan* (Douglas, Sarpy, Lancaster)
- *Core metropolitan outlying* (Washington, Saunders, Seward, Cass)

Small Urban

- *Non-core metropolitan* (Dakota, Hall)
- *Non-core metropolitan outlying* (Howard, Hamilton, Merrick, Dixon)
- *Micropolitan* (Scotts Bluff, Lincoln, Dawson, Buffalo, Adams, Madison, Dodge, Platte, Gage)

Rural

- *Micropolitan outlying* (Banner, McPherson, Logan, Gosper, Kearney, Clay, Pierce, Stanton)
- *Non-metro/micro with large town* (Dawes, Box Butte, Cheyenne, Cherry, Keith, Custer, Red Willow, Phelps, Holt, York, Jefferson, Richardson, Nemaha, Otoe, Saline, Butler, Colfax, Cuming, Wayne)
- *Non-metro/micro with no large towns* (Sioux, Kimball, Morrill, Sheridan, Garden, Deuel, Grant, Arthur, Perkins, Chase, Dundy, Hooker, Thomas, Hayes, Hitchcock, Frontier, Furnas, Harlan, Keya Paha, Brown, Blaine, Rock, Loup, Boyd, Garfield, Wheeler, Valley, Sherman, Franklin, Greeley, Webster, Nuckolls, Nance, Boone, Antelope, Polk, Fillmore, Thayer, Pawnee, Johnson, Knox, Cedar, Thurston, Burt)

Appendix D: Indicator Definitions

Administrators

Indicator	Definition
1. School has a formal written policy for removal and return to play for athletes with suspected concussions	Percentage responding “Yes” to the question: “Does your school or district have a formal written policy for removal and return to play for athletes with suspected concussions?” Response options: Yes; No, but an informal protocol is in place; No policy or informal protocol; unknown
2. School has made concussion education/training available to <u>teachers</u>	Percentage indicating that they have made concussion training available to the respective groups. “Unknown” and “Not applicable” responses counted as missing.
3. School has made concussion education/training available to <u>coaches</u>	
4. School has made concussion education/training available to <u>parents</u>	
5. School has made concussion education/training available to <u>athletes</u>	
6. School has made concussion education/training available to <u>health professionals at school</u>	
7. School has made concussion education/training mandatory for <u>teachers</u>	
8. School has made concussion education/training available to <u>coaches</u>	
9. School has made concussion education/training mandatory for <u>parents</u>	
10. School has made concussion education/training mandatory for <u>athletes</u>	
11. School has made concussion education/training mandatory for <u>health professionals at school</u>	
12. Have participated in any concussion training	Percentage indicating that they have participated in any concussion training.
13. Coaches or athletic trainers always remove an athlete with a suspected concussion from play	Percentage responding “Always” to the question: “How often do coaches or athletic trainers at your school remove an athlete with a suspected concussion from play?”

	Response options: Always, Often, Sometimes, Rarely, Never, Unknown, Not applicable “Unknown” and “Not applicable” responses counted as missing.
14. School district has information about concussions for parents and students on the district website	Percentage indicating that their school district has information about concussions for parents and students on the district website. Response options: Yes, No, Unknown
15. School has a written return-to-learn policy and consistently follows it	Percentage responding “Yes” to the question: “Does your school (or district) have a written return-to-learn policy that provides adjustments for the classroom work of students with a suspected or diagnosed concussion?” Response options: Yes; Yes, but the formal policy is not consistently followed; No, but an informal protocol is in place; No policy or informal protocol; Unknown
16. School has a designated person(s) or a concussion management team to assist students as they complete return-to-learn	Percentage indicating that their school or district has a designated person(s) or a concussion management team to assist students as they complete return-to-learn. Response options: Yes, No, Unknown, Not applicable “Not applicable” responses counted as missing.
17. School has a designated person responsible for communication with the <u>family</u> of students who have sustained a concussion	Percentage indicating that someone is designated for communication with the respective groups for students who have sustained a concussion. Response options: Yes, No, Unknown, Not applicable “Not applicable” responses counted as missing.
18. School has a designated person responsible for communication with the <u>medical provider(s)</u> of students who have sustained a concussion	
19. Leader of the concussion management team is available in the school building full-time	Among those indicating that they their school or district has a designated person(s) or a concussion management team to assist students as they complete return to learn, the percentage indicating that the leader of the concussion management team is available in the building full-time. Response options: Yes, No, Unknown
20. Someone on the concussion management team checks in with recovering students at least 2-3 times per week	Percentage responding “Daily” or “2-3 times a week” to the question: “How frequently does someone on the concussion management team check in with recovering students or have students check in with them?” (among those indicating that they their school or district has a designated person(s) or a concussion management team to assist students as they complete return to learn) Response options: Daily, 2-3 times a week, Once a week, Never, Unknown, Not applicable “Unknown” and “Not applicable” responses counted as missing.

<p>21. Teachers notified the same or following day of a student’s suspected or diagnosed concussion</p>	<p>Percentage responding “Same day” or “Following day” to the question: When are teachers usually notified of a student’s suspected or diagnosed concussion?” Response options: Same day, Following day, Within the week, Not at all, Unknown, Not applicable “Unknown” and “Not applicable” responses counted as missing.</p>
<p>22. Teachers updated on a student’s progress at least 2-3 times per week</p>	<p>Percentage responding “Daily” or “2-3 times a week” to the question: “How often are teachers typically updated on a student’s progress?” Response options: Daily, 2-3 times a week, Once a week, Never, Unknown, Not applicable “Unknown” and “Not applicable” responses counted as missing.</p>
<p>23. Parents have come to administrators at school or district with concerns about concussions</p>	<p>Percentage indicating that parents have come to administrators at school or district with concerns about concussions. Response options: Yes, No, Unknown “Unknown” responses counted as missing.</p>
<p>24. Fully or mostly aware of Nebraska’s Concussion Awareness Act</p>	<p>Percentage responding “Fully aware” or “Mostly aware” to the question: “Prior to reading the preceding information, how would you have rated your level of awareness with Nebraska’s Concussion Awareness Act?” Prior to this question respondents were given brief information about Nebraska’s Concussion Awareness Act. Response options: Fully aware, Mostly aware, Somewhat familiar, Not very familiar, Not at all familiar</p>
<p>25. Highly or mostly knowledgeable regarding the <u>recognition of concussions</u></p>	<p>Percentage responding “Highly knowledgeable” or “Mostly knowledgeable” to the question: “How would you rate your level of knowledge pertaining to the recognition of concussions?” Response options: Highly knowledgeable, Mostly knowledgeable, Somewhat knowledgeable, Not very knowledgeable, Not at all knowledgeable</p>
<p>26. Highly or mostly knowledgeable regarding the <u>management of students with concussions</u></p>	<p>Percentage responding “Highly knowledgeable” or “Mostly knowledgeable” to the question: “How would you rate your level of knowledge pertaining to the management of students with concussions?” Response options: Highly knowledgeable, Mostly knowledgeable, Somewhat knowledgeable, Not very knowledgeable, Not at all knowledgeable</p>
<p>27. Agree or strongly agree that administrators and staff in school/district would benefit from a greater understanding about <u>Nebraska’s Concussion Awareness Act</u></p>	<p>Percentage responding “Agree” or “Strongly Agree” to the survey item: “Please rate your level of agreement with this statement: ‘Administrators and staff in my school/district would benefit from gaining a greater understanding about Nebraska’s Concussion Awareness Act.’”</p>

	Response options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree
28. Agree or strongly agree that administrators and staff in school/district would benefit from a greater understanding about <u>concussion management, including classroom adjustments</u>	Percentage responding “Agree” or “Strongly Agree” to the survey item: “Please rate your level of agreement with this statement: ‘Administrators and staff in my school/district would benefit from gaining a greater understanding about concussion management, including classroom adjustments.’” Response options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree
29. Aware that a BIRSST is available for school/district	Percentage indicating that they are aware that a Brain Injury Regional Support Team (BIRSST) is available for their school/district.

Teachers

Indicator	Definition
1. Always notified when a student in classroom has sustained a concussion	Percentage responding “Always” to the question: “How often are you notified when a student in your classroom has sustained a concussion?” Response options: Always, Often, Sometimes, Rarely, Never, Unknown, Not applicable – I’ve never had a student with a concussion in my classroom “Not applicable” responses counted as missing.
2. Know how to modify lessons to meet the needs of a student with a concussion	Percentage responding “Yes” to the question: “If a student returns to your classroom with a concussion, do you know how to modify your lessons and/or meet their needs?” Response options: Yes, No, Unknown
3. School has a written return-to-learn policy and consistently follows it	Percentage responding “Yes” to the question: “Does your school (or district) have a written return-to-learn policy that provides adjustments for the classroom work of students with a suspected or diagnosed concussion?” Response options: Yes; Yes, but the formal policy is not consistently followed; No, but an informal protocol is in place; No policy or informal protocol; Unknown
4. School has made concussion education/training available	Percentage responding “Yes” to the question: “Has your school made concussion education/training available to you?” Response options: Yes, No, Unknown
5. Have participated in any concussion training	Percentage indicating that they have participated in any concussion training.
6. School has made concussion education/training mandatory	Percentage responding “Yes” to the question: “Has your school made concussion education/training mandatory for you?” Response options: Yes, No, Unknown
7. Coach a school sport	
8. Have had to provide classroom adjustments for a student with a concussion or mild head injury in the past five years	Percentage indicating that they have had to provide any classroom adjustments for a student with a concussion or a mild head injury in their classroom in the last five years.
9. School has a designated person(s) or a concussion management team to assist students as they complete return-to-learn	Percentage indicating that their school or district has a designated person(s) or a concussion management team to assist students as they complete return-to-learn. Response options: Yes, No, Unknown
10. Leader of the concussion management team is available in the school building full-time	Among those indicating that they their school or district has a designated person(s) or a concussion management team to assist students as they complete return to learn, the percentage indicating that the leader of the concussion management team is available in the building full-time. Response options: Yes, No, Unknown

<p>11. Someone on the concussion management team checks in with recovering students at least 2-3 times per week</p>	<p>Percentage responding “Daily” or “2-3 times a week” to the question: “How frequently does someone on the concussion management team check in with recovering students or have students check in with them?” (among those indicating that they their school or district has a designated person(s) or a concussion management team to assist students as they complete return to learn) Response options: Daily, 2-3 times a week, Once a week, Never, Unknown “Unknown” responses counted as missing.</p>
<p>12. Teachers notified the same or following day of a student’s suspected or diagnosed concussion</p>	<p>Percentage responding “Same day” or “Following day” to the question: When are teachers usually notified of a student’s suspected or diagnosed concussion?” Response options: Same day, Following day, Within the week, Not at all, Unknown “Unknown” responses counted as missing.</p>
<p>13. Teachers updated on a student’s progress at least 2-3 times per week</p>	<p>Percentage responding “Daily” or “2-3 times a week” to the question: “How often are teachers typically updated on a student’s progress?” Response options: Daily, 2-3 times a week, Once a week, Never, Unknown “Unknown” responses counted as missing.</p>
<p>14. Teachers provide updates to other staff at school regarding the progress of a student with a concussion at least 2-3 times per week</p>	<p>Percentage responding “Daily” or “2-3 times a week” to the question: “As a teacher of a student with a suspected or diagnosed concussion, how often do you provide updates to other staff at your school (such as a concussion management team or other faculty and staff) about that student?” Response options: Daily, 2-3 times a week, Once a Week, Not applicable – I’ve never had a student with a suspected or diagnosed concussion “Not applicable” responses counted as missing.</p>
<p>15. Fully or mostly aware of Nebraska’s Concussion Awareness Act</p>	<p>Percentage responding “Fully aware” or “Mostly aware” to the question: “Prior to reading the preceding information, how would you have rated your level of awareness with Nebraska’s Concussion Awareness Act?” Prior to this question respondents were given brief information about Nebraska’s Concussion Awareness Act. Response options: Fully aware, Mostly aware, Somewhat familiar, Not very familiar, Not at all familiar</p>
<p>16. Highly or mostly knowledgeable regarding the <u>recognition of concussions</u></p>	<p>Percentage responding “Highly knowledgeable” or “Mostly knowledgeable” to the question: “How would you rate your level of knowledge pertaining to the recognition of concussions?” Response options: Highly knowledgeable, Mostly knowledgeable, Somewhat knowledgeable, Not very knowledgeable, Not at all knowledgeable</p>

<p>17. Highly or mostly knowledgeable regarding the <u>management of students with concussions</u></p>	<p>Percentage responding “Highly knowledgeable” or “Mostly knowledgeable” to the question: “How would you rate your level of knowledge pertaining to the management of students with concussions?” Response options: Highly knowledgeable, Mostly knowledgeable, Somewhat knowledgeable, Not very knowledgeable, Not at all knowledgeable</p>
<p>18. Agree or strongly agree that they would benefit from a greater understanding about <u>Nebraska’s Concussion Awareness Act</u></p>	<p>Percentage responding “Agree” or “Strongly Agree” to the survey item: “Please rate your level of agreement with this statement: ‘I would benefit from gaining a greater understanding about Nebraska’s Concussion Awareness Act.’” Response options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree</p>
<p>19. Agree or strongly agree that they would benefit from a greater understanding about <u>concussion management, including classroom adjustments</u></p>	<p>Percentage responding “Agree” or “Strongly Agree” to the survey item: “Please rate your level of agreement with this statement: ‘I would benefit from gaining a greater understanding about concussion management, including classroom adjustments.’” Response options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree</p>
<p>20. Aware that a BIRSST is available for school/district</p>	<p>Percentage indicating that they are aware that a Brain Injury Regional Support Team (BIRSST) is available for their school/district.</p>

School Counselors, Psychologists, and Social Workers

Indicator	Definition
1. School has a written return-to-learn policy and consistently follows it	Percentage responding “Yes” to the question: “Does your school (or district) have a written return-to-learn policy that provides adjustments for the classroom work of students with a suspected or diagnosed concussion?” Response options: Yes; Yes, but the formal policy is not consistently followed; No, but an informal protocol is in place; No policy or informal protocol; Unknown
2. School has made concussion education/training available	Percentage responding “Yes” to the question: “Has your school made concussion education/training available to you?” Response options: Yes, No, Unknown
3. Have participated in any concussion training	Percentage indicating that they have participated in any concussion training.
4. School has made concussion education/training mandatory	Percentage responding “Yes” to the question: “Has your school made concussion education/training mandatory for you?” Response options: Yes, No, Unknown
5. School has a designated person(s) or a concussion management team to assist students as they complete return-to-learn	Percentage indicating that their school or district has a designated person(s) or a concussion management team to assist students as they complete return-to-learn. Response options: Yes, No, Unknown
6. Leader of the concussion management team is available in the school building full-time	Among those indicating that they their school or district has a designated person(s) or a concussion management team to assist students as they complete return to learn, the percentage indicating that the leader of the concussion management team is available in the building full-time. Response options: Yes, No, Unknown
7. Someone on the concussion management team checks in with recovering students at least 2-3 times per week	Percentage responding “Daily” or “2-3 times a week” to the question: “How frequently does someone on the concussion management team check in with recovering students or have students check in with them?” (among those indicating that they their school or district has a designated person(s) or a concussion management team to assist students as they complete return to learn) Response options: Daily, 2-3 times a week, Once a week, Never, Unknown “Unknown” responses counted as missing.
8. Teachers notified the same or following day of a student’s suspected or diagnosed concussion	Percentage responding “Same day” or “Following day” to the question: When are teachers usually notified of a student’s suspected or diagnosed concussion?” Response options: Same day, Following day, Within the week, Not at all, Unknown “Unknown” responses counted as missing.

<p>9. Teachers updated on a student’s progress at least 2-3 times per week</p>	<p>Percentage responding “Daily” or “2-3 times a week” to the question: “How often are teachers typically updated on a student’s progress?” Response options: Daily, 2-3 times a week, Once a week, Never, Unknown “Unknown” responses counted as missing.</p>
<p>10. Fully or mostly aware of Nebraska’s Concussion Awareness Act</p>	<p>Percentage responding “Fully aware” or “Mostly aware” to the question: “Prior to reading the preceding information, how would you have rated your level of awareness with Nebraska’s Concussion Awareness Act?” Prior to this question respondents were given brief information about Nebraska’s Concussion Awareness Act. Response options: Fully aware, Mostly aware, Somewhat familiar, Not very familiar, Not at all familiar</p>
<p>11. Highly or mostly knowledgeable regarding the <u>recognition of concussions</u></p>	<p>Percentage responding “Highly knowledgeable” or “Mostly knowledgeable” to the question: “How would you rate your level of knowledge pertaining to the recognition of concussions?” Response options: Highly knowledgeable, Mostly knowledgeable, Somewhat knowledgeable, Not very knowledgeable, Not at all knowledgeable</p>
<p>12. Highly or mostly knowledgeable regarding the <u>management of students with concussions</u></p>	<p>Percentage responding “Highly knowledgeable” or “Mostly knowledgeable” to the question: “How would you rate your level of knowledge pertaining to the management of students with concussions?” Response options: Highly knowledgeable, Mostly knowledgeable, Somewhat knowledgeable, Not very knowledgeable, Not at all knowledgeable</p>
<p>13. Agree or strongly agree that they would benefit from a greater understanding about <u>Nebraska’s Concussion Awareness Act</u></p>	<p>Percentage responding “Agree” or “Strongly Agree” to the survey item: “Please rate your level of agreement with this statement: ‘I would benefit from gaining a greater understanding about Nebraska’s Concussion Awareness Act.’” Response options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree</p>
<p>14. Agree or strongly agree that they would benefit from a greater understanding about <u>concussion management, including classroom adjustments</u></p>	<p>Percentage responding “Agree” or “Strongly Agree” to the survey item: “Please rate your level of agreement with this statement: ‘I would benefit from gaining a greater understanding about concussion management, including classroom adjustments.’” Response options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree</p>
<p>15. Aware that a BIRSST is available for school/district</p>	<p>Percentage indicating that they are aware that a Brain Injury Regional Support Team (BIRSST) is available for their school/district.</p>

School Nurses

Indicator	Definition
1. School has a written return-to-learn policy and consistently follows it	Percentage responding “Yes” to the question: “Does your school (or district) have a written return-to-learn policy that provides adjustments for the classroom work of students with a suspected or diagnosed concussion?” Response options: Yes; Yes, but the formal policy is not consistently followed; No, but an informal protocol is in place; No policy or informal protocol; Unknown
2. School has made concussion education/training available	Percentage responding “Yes” to the question: “Has your school made concussion education/training available to you?” Response options: Yes, No, Unknown
3. Have participated in any concussion training	Percentage indicating that they have participated in any concussion training.
4. School has made concussion education/training mandatory	Percentage responding “Yes” to the question: “Has your school made concussion education/training mandatory for you?” Response options: Yes, No, Unknown
5. School has a designated person(s) or a concussion management team to assist students as they complete return-to-learn	Percentage indicating that their school or district has a designated person(s) or a concussion management team to assist students as they complete return-to-learn. Response options: Yes, No, Unknown
6. Leader of the concussion management team is available in the school building full-time	Among those indicating that they their school or district has a designated person(s) or a concussion management team to assist students as they complete return to learn, the percentage indicating that the leader of the concussion management team is available in the building full-time. Response options: Yes, No, Unknown
7. Someone on the concussion management team checks in with recovering students at least 2-3 times per week	Percentage responding “Daily” or “2-3 times a week” to the question: “How frequently does someone on the concussion management team check in with recovering students or have students check in with them?” (among those indicating that they their school or district has a designated person(s) or a concussion management team to assist students as they complete return to learn) Response options: Daily, 2-3 times a week, Once a week, Never, Unknown “Unknown” responses counted as missing.
8. Teachers notified the same or following day of a student’s suspected or diagnosed concussion	Percentage responding “Same day” or “Following day” to the question: When are teachers usually notified of a student’s suspected or diagnosed concussion?” Response options: Same day, Following day, Within the week, Not at all, Unknown “Unknown” responses counted as missing.

<p>9. Teachers updated on a student's progress at least 2-3 times per week</p>	<p>Percentage responding "Daily" or "2-3 times a week" to the question: "How often are teachers typically updated on a student's progress?" Response options: Daily, 2-3 times a week, Once a week, Never, Unknown "Unknown" responses counted as missing.</p>
<p>10. Able to provide education or guidance to teachers about individual students with concussions</p>	<p>Percentage indicating that they do (or would be able to) as a school nurse provide education or guidance to teachers about individual students with concussions.</p>
<p>11. Fully or mostly aware of Nebraska's Concussion Awareness Act</p>	<p>Percentage responding "Fully aware" or "Mostly aware" to the question: "Prior to reading the preceding information, how would you have rated your level of awareness with Nebraska's Concussion Awareness Act?" Prior to this question respondents were given brief information about Nebraska's Concussion Awareness Act. Response options: Fully aware, Mostly aware, Somewhat familiar, Not very familiar, Not at all familiar</p>
<p>12. Highly or mostly knowledgeable regarding the <u>recognition of concussions</u></p>	<p>Percentage responding "Highly knowledgeable" or "Mostly knowledgeable" to the question: "How would you rate your level of knowledge pertaining to the recognition of concussions?" Response options: Highly knowledgeable, Mostly knowledgeable, Somewhat knowledgeable, Not very knowledgeable, Not at all knowledgeable</p>
<p>13. Highly or mostly knowledgeable regarding the <u>management of students with concussions</u></p>	<p>Percentage responding "Highly knowledgeable" or "Mostly knowledgeable" to the question: "How would you rate your level of knowledge pertaining to the management of students with concussions?" Response options: Highly knowledgeable, Mostly knowledgeable, Somewhat knowledgeable, Not very knowledgeable, Not at all knowledgeable</p>
<p>14. Agree or strongly agree that they would benefit from a greater understanding about <u>Nebraska's Concussion Awareness Act</u></p>	<p>Percentage responding "Agree" or "Strongly Agree" to the survey item: "Please rate your level of agreement with this statement: 'I would benefit from gaining a greater understanding about Nebraska's Concussion Awareness Act.'" Response options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree</p>
<p>15. Agree or strongly agree that they would benefit from a greater understanding about <u>concussion management, including classroom adjustments</u></p>	<p>Percentage responding "Agree" or "Strongly Agree" to the survey item: "Please rate your level of agreement with this statement: 'I would benefit from gaining a greater understanding about concussion management, including classroom adjustments.'" Response options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree</p>

16. Aware that a BIRSST is available for school/district	Percentage indicating that they are aware that a Brain Injury Regional Support Team (BIRSST) is available for their school/district.
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Special Education, Para-educators, and Other Staff

Indicator	Definition
1. Always notified when a student in classroom has sustained a concussion	Percentage responding “Always” to the question: “How often are you notified when a student you serve has sustained a concussion?” Response options: Always, Often, Sometimes, Rarely, Never, Unknown, Not applicable – I’ve never had a student with a concussion in my classroom “Not applicable” responses counted as missing.
2. Know how to provide adjustments to meet the needs of a student with a concussion	Percentage responding “Yes” to the question: “If a student you serve returns to the classroom with a concussion, do you know how to provide adjustments to meet their needs?” Response options: Yes, No, Unknown
3. School has a written return-to-learn policy and consistently follows it	Percentage responding “Yes” to the question: “Does your school (or district) have a written return-to-learn policy that provides adjustments for the classroom work of students with a suspected or diagnosed concussion?” Response options: Yes; Yes, but the formal policy is not consistently followed; No, but an informal protocol is in place; No policy or informal protocol; Unknown
4. School has made concussion education/training available	Percentage responding “Yes” to the question: “Has your school made concussion education/training available to you?” Response options: Yes, No, Unknown
5. Have participated in any concussion training	Percentage indicating that they have participated in any concussion training.
6. School has made concussion education/training mandatory	Percentage responding “Yes” to the question: “Has your school made concussion education/training mandatory for you?” Response options: Yes, No, Unknown
7. School has a designated person(s) or a concussion management team to assist students as they complete return-to-learn	Percentage indicating that their school or district has a designated person(s) or a concussion management team to assist students as they complete return-to-learn. Response options: Yes, No, Unknown
8. Leader of the concussion management team is available in the school building full-time	Among those indicating that they their school or district has a designated person(s) or a concussion management team to assist students as they complete return to learn, the percentage indicating that the leader of the concussion management team is available in the building full-time. Response options: Yes, No, Unknown
9. Someone on the concussion management team checks in with recovering students at least 2-3 times per week	Percentage responding “Daily” or “2-3 times a week” to the question: “How frequently does someone on the concussion management team check in with recovering students or have students check in with them?” (among those indicating that they their school or district has a designated person(s))

	<p>or a concussion management team to assist students as they complete return to learn) Response options: Daily, 2-3 times a week, Once a week, Never, Unknown “Unknown” responses counted as missing.</p>
<p>10. Fully or mostly aware of Nebraska’s Concussion Awareness Act</p>	<p>Percentage responding “Fully aware” or “Mostly aware” to the question: “Prior to reading the preceding information, how would you have rated your level of awareness with Nebraska’s Concussion Awareness Act?” Prior to this question respondents were given brief information about Nebraska’s Concussion Awareness Act. Response options: Fully aware, Mostly aware, Somewhat familiar, Not very familiar, Not at all familiar</p>
<p>11. Highly or mostly knowledgeable regarding the <u>recognition of concussions</u></p>	<p>Percentage responding “Highly knowledgeable” or “Mostly knowledgeable” to the question: “How would you rate your level of knowledge pertaining to the recognition of concussions?” Response options: Highly knowledgeable, Mostly knowledgeable, Somewhat knowledgeable, Not very knowledgeable, Not at all knowledgeable</p>
<p>12. Highly or mostly knowledgeable regarding the <u>management of students with concussions</u></p>	<p>Percentage responding “Highly knowledgeable” or “Mostly knowledgeable” to the question: “How would you rate your level of knowledge pertaining to the management of students with concussions?” Response options: Highly knowledgeable, Mostly knowledgeable, Somewhat knowledgeable, Not very knowledgeable, Not at all knowledgeable</p>
<p>13. Agree or strongly agree that they would benefit from a greater understanding about <u>Nebraska’s Concussion Awareness Act</u></p>	<p>Percentage responding “Agree” or “Strongly Agree” to the survey item: “Please rate your level of agreement with this statement: ‘I would benefit from gaining a greater understanding about Nebraska’s Concussion Awareness Act.’” Response options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree</p>
<p>14. Agree or strongly agree that they would benefit from a greater understanding about <u>concussion management, including classroom adjustments</u></p>	<p>Percentage responding “Agree” or “Strongly Agree” to the survey item: “Please rate your level of agreement with this statement: ‘I would benefit from gaining a greater understanding about concussion management, including classroom adjustments.’” Response options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree</p>
<p>15. Aware that a BIRSST is available for school/district</p>	<p>Percentage indicating that they are aware that a Brain Injury Regional Support Team (BIRSST) is available for their school/district.</p>

School Board Presidents

Indicator	Definition
1. School district has information about concussions for parents and students on the district website	Percentage indicating that their school district has information about concussions for parents and students on the district website. Response options: Yes, No, Unknown
2. All schools offering school-sanctioned athletics in district have a formal written policy for removal and return to play for athletes with suspected concussions	Percentage responding "Yes" to the question: "Do all of the schools that offer school-sanctioned athletics in your school district have a formal written policy for removal and return to play for athletes with a suspected concussion?" Response options: Yes; No, but an informal protocol is in place; No policy or informal protocol; unknown
3. All schools in the district have a written return-to-learn policy and consistently follows it	Percentage responding "Yes" to the question: "Do all of the schools in your district have a written return-to-learn policy that provides adjustments for the classroom work of students with a suspected or diagnosed concussion?" Response options: Yes; Yes, but the formal policy is not consistently followed; No, but an informal protocol is in place; No policy or informal protocol; Unknown
4. Parents have come to administrators at school or district with concerns about concussions	Percentage indicating that parents have come to administrators at school or district with concerns about concussions. Response options: Yes, No, Unknown "Unknown" responses counted as missing.
5. Fully or mostly aware of Nebraska's Concussion Awareness Act	Percentage responding "Fully aware" or "Mostly aware" to the question: "Prior to reading the preceding information, how would you have rated your level of awareness with Nebraska's Concussion Awareness Act?" Prior to this question respondents were given brief information about Nebraska's Concussion Awareness Act. Response options: Fully aware, Mostly aware, Somewhat familiar, Not very familiar, Not at all familiar
6. Agree or strongly agree that <u>school board</u> in school/district would benefit from a greater understanding about Nebraska's Concussion Awareness Act	Percentage responding "Agree" or "Strongly Agree" to the survey item: "Please rate your level of agreement with this statement: 'My school board would benefit from gaining a greater understanding about Nebraska's Concussion Awareness Act.'" Response options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree
7. Agree or strongly agree that teachers and administrators in school/district would benefit from a greater understanding about <u>Nebraska's Concussion Awareness Act</u>	Percentage responding "Agree" or "Strongly Agree" to the survey item: "Please rate your level of agreement with this statement: 'Teachers and administrators in my school district would benefit from gaining a greater understanding about Nebraska's Concussion Awareness Act.'" Response options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree