



SAFETY

Heads Up Hockey



REVISED 2/19

OBJECTIVES

- To introduce USA Hockey's "Heads Up Hockey" program
- To provide coaches with information regarding severe head and spinal injuries

INTRODUCTION

You know what it takes to help your team score goals, play solid defense and have fun: knowledge, skating, passing, shooting and stickhandling skills; each player's commitment and motivation; good teamwork; and lots of practice.

But we're sure that's not all you care about. **Your instructions and actions can have a big influence on the safety of every player on the ice** – especially when it comes to preventing potentially serious injuries. Unfortunately, the information and help you need for this part of your job aren't widely available.

That's where "Heads Up Hockey" comes in. In this program, USA Hockey has developed and assembled the information, advice and techniques to help you reduce the risk of head injuries.

"Heads Up Hockey" starts with medical information and specific actions you can take to prevent head injuries. But there's a lot more to it.

USA Hockey is a firm believer in the benefits of high-quality protective hockey equipment for its players. **But no equipment can prevent a serious spinal injury without other training and instruction.** And, unfortunately, some players get an "invulnerable" feeling from wearing today's high-tech protective equipment, resulting in more reckless play.

By following the "Heads Up Hockey" techniques in this chapter, you will be developing new awareness and playing skills in each of your players. When you tell your kids "Heads up" you'll be telling them not just to play safe, but to focus. And player focus means ... BETTER HOCKEY!

Much of the material in this chapter is directed toward age levels at which body checking is permitted. But the basic principles apply to all age levels of hockey.

When you get your team playing "Heads Up Hockey", you're helping your players, helping your team and helping the whole game of hockey, by making the sport even more appealing at a time of growing popularity.

Let's play HEADS UP HOCKEY!

HEAD INJURIES ARE PREVENTABLE

Hockey is a contact sport, but like any other contact sport, it has its share of sudden jolts. Players routinely make contact with other players, goal posts, boards, pucks, sticks and with the ice itself. It's all part of the game. But injuries, **especially potentially serious head injuries, are not part of the game.**

You can raise your player's awareness of spinal injuries and concussions by learning more about how injuries happen, by passing this information along to your players and by practicing specific prevention and playing techniques detailed in this chapter.

Let's start by learning more about how these injuries happen.

How Spinal Injuries Happen in Hockey

The upper cervical spinal column has a natural curve, which lends flexibility to the head and neck when the neck is held in a normal, "heads up" position. (See figure 21-1)

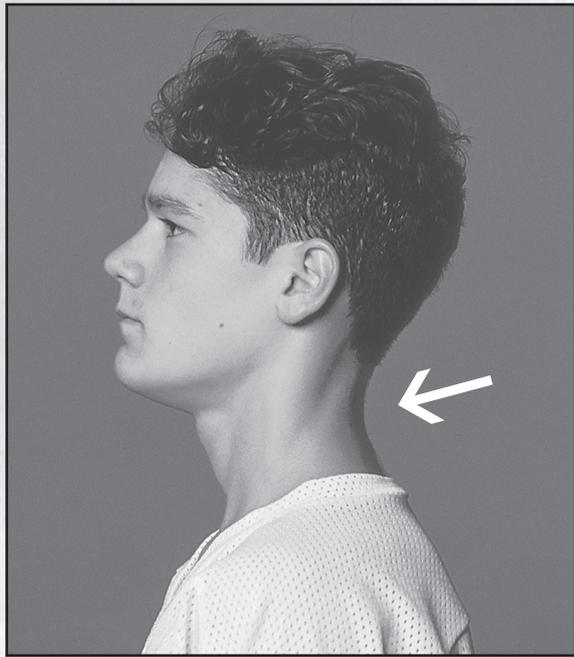


Figure 21-1. The natural “heads up” position, which gives your neck the maximum flexibility to take a hit.

However, when the head is flexed (chin toward the chest), this normal curve is removed, and the cervical spine becomes straight, as figure 21-2 demonstrates.



Figure 21-2. When the neck is flexed (head down), an impact can result in serious spinal injury.

In this “head down” position, if a player hits the boards or a goal post head on, the head stops suddenly, but the body’s movement continues, compressing the spine. This force can produce a shock greater than the neck’s discs and muscles can cushion, resulting in a fracture or break of one or more of the vertebrae. And if one breaks, it can cause compression of the spinal cord, resulting in paralysis below the level of the fracture.

According to research done among a wide range of hockey players, almost all on-ice cervical spine injuries have been due to the head being slightly flexed (head down) while making head-on contact with the boards or goal post.

A player doesn’t have to be going at full speed for this to happen – it can occur at walking speed.

How Concussions Happen in Hockey

There are differences of opinion on the definition of a concussion, and on how to judge its severity.

A concussion is a brain injury caused by direct or transferred impact forces to the head following intentional or unintentional collisions.

An athlete who is symptomatic after a concussion requires complete physical and cognitive rest – no physical activity or school. Complete rest also means no reading, computers, video games or text messaging.

When the athlete is free of all symptoms at rest, they may begin a graded exertion protocol and progress through each activity stage, provided that no symptoms recur.

Simply put, it’s an injury that arises from a blow to the head, usually when the head is moving. Symptoms of a concussion range from mild dizziness to “seeing stars” to severe headaches and nausea to unconsciousness.

In hockey, concussions are not the most common form of injury, but they require your attention for two important reasons.

1. Concussions, especially mild ones, may be hard to recognize. Players may show only momentary confusion from being “dinged” or “having their bell rung.”

2. A concussion, even a mild one, may significantly increase the chances of getting a second concussion, and may endanger the player's awareness and safety on the ice.

No head impact injury can truly be regarded as minor. Each incident requires your prompt evaluation and attention.

What Can You Do?

The risk of head injuries at all levels of hockey can be reduced through your participation in "*Heads Up Hockey*."

1. Play Heads Up Hockey
 - Know the basics of injury prevention and pass them along to your players.
 - Practice the team on-ice safety exercises in this chapter.
 - Promote fair play and clean checking on your team, and insist on it from your opponents.
2. Check your players' equipment before, during, and after each practice session or game, and teach them to inspect it as well.
3. Keep your team in good shape through the flexibility and strengthening exercises in this chapter.
4. Know what to look for and how to respond when a player gets hurt by using the information in this chapter.

PLAYING HEADS UP HOCKEY Incorporating "*Heads Up Hockey*" Into Team Practices

In this section, you'll find specific ways to improve the safety and quality of your team's play. Here are some ways to incorporate this material into your practice routine.

- Show the "*Heads Up Hockey*" Challenge video at the beginning of each session. Invite parents and team managers to see it.
- Plan on 15 minutes of "*Heads Up Hockey*" at every other practice session.
- At each of these "*Heads Up Hockey*" sessions, hold a:
 - 5-minute pre-session talk with Q & A
 - 10-minute on-ice drill
- Hold five "*Heads Up Hockey*" sessions total

Heads Up — Tell Them What It Means

When we hear the phrase "Heads Up," we hear "be alert" and "be careful." Good advice for hockey players! But in "*Heads Up Hockey*," it has a literal meaning, too.

At your first practice session, start by asking your players what they think "heads up" means, and help them translate it into hockey terms. You might get answers like:

- know where the puck is
- know where your teammates are
- know where your opponents are
- know where you're skating to
- be ready to receive a pass or take a shot
- know where your "man" is
- look for open ice

Next, you can refer to the idea of "heads up" as playing safe hockey. Ask players what else the phrase means to them.

Depending on their age level, players might say:

- skating to avoid other players
- avoiding goal posts while driving to the net
- keeping your stick down
- not losing control on the ice
- controlling your temper
- knowing when you're about to get hit or be checked
- preparing for impact along the boards

Now it's time to tell them Rule One of "*Heads Up Hockey*": in hockey, "heads up" literally means exactly what it says: "Keep your head up on the ice, especially when it looks like you're going to take a hit."

Tell players that this is the single most important thing to know and to do to prevent head injuries and tell them that you're going to be looking for it from now on. Explain that most people duck when they see a hit coming, but doing so puts them in danger.

DRILL #1 Heads Up — Say it Loud

During your first on-ice "*Heads Up Hockey*" session, you don't need any specific drills or plays to reinforce what you've told your team. Just watch their play,

and shout “Heads Up” from time to time throughout the session. Use it to remind players to keep alert, to point out unsafe situations and to encourage skaters to keep their heads up, whether they’re skating or sliding after a fall.

Angling In

Skating into the boards at an angle means better puck control and less risk of injury.

When the puck goes into a corner, everybody wants to dig it out and dig it out fast. But what’s the best way to get it out? And what’s the safest way? Skating in on an angle is the best and the safest way.

- Skating in on an angle affords players a **better approach angle** to the puck, and by giving the body a safe position to accept an impact with the boards, it allows players to **keep skating** and gain control of the puck.
- When players skate into the corners at an angle, the risk of hitting the boards with their helmets first is greatly reduced. A leg, side or arm will absorb most of the impact.

Start this “Heads Up Hockey” discussion by inviting players to imagine a puck moving through a corner when they’re close to the nearest end zone faceoff dot. How should they go after the puck and why?

Now ask players to imagine the same puck moving the same way, but with an opponent behind them. Should there be any difference in the approach? Why?

After getting answers from several players, explain the advantages of skating to the puck on an angle, rather than head-on into the boards.

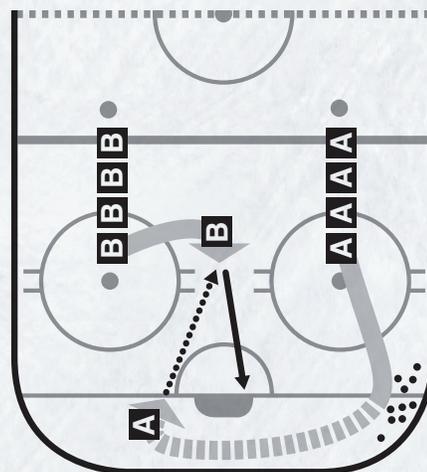
When demonstrating “angling in,” be sure to cover these points:

- Go in on an angle.
- Keep a low center of gravity.
- Keep your knees bent, back straight and head up.
- Absorb the shock over the widest possible part of your body.
- Keep your feet parallel to the boards.

- Keep your forearms, hands and legs ready.
- Lean into the impact.
- Never hit the boards or glass with the tip of your shoulder – it can cause an injury.
- Check over your shoulder to see where your opponent is.

DRILL #2

1. Set up two lines of four players (A and B) behind the faceoff dots and a pile of pucks in the left corner.
2. On the whistle, the first player on the left faceoff spot (A) angles into the corner, picks up a puck, skates behind the net and makes a pass to (B), who has moved from the faceoff spot to the slot area.
3. Player (B) takes a shot on goal and joins the (A) line. Player (A) goes to the (B) line.



Variations

- Halfway through the drill, move the pucks to the right corner so that players learn to pick up a puck and pass off both the forehand and backhand.
- A coach can stand to the side of the (A) line and slide a puck into the corner one at a time.
- For age levels with body checking, add a line of chasers who try to catch the puck carrier and angle him or her into the boards.

HITTING THE BOARDS

Good ways and bad ways to have a close encounter with a goal post, the boards or another player.

It's going to happen: if you play hockey, you're going to skate into things. But how players skate into the boards, the goal post or another player is important for their safety as well as their ability to stay in the play.

Here are two simple rules:

- Don't duck.
- Hit the boards with anything but your head first.

In Section 1, you told players why they shouldn't duck their head on impact, here's an opportunity to reinforce it.

Start discussion by asking players what they should hit the boards with first when they know an impact is coming.

They might answer:

- an arm
- their backs
- a skate
- a leg
- their sides
- their sticks

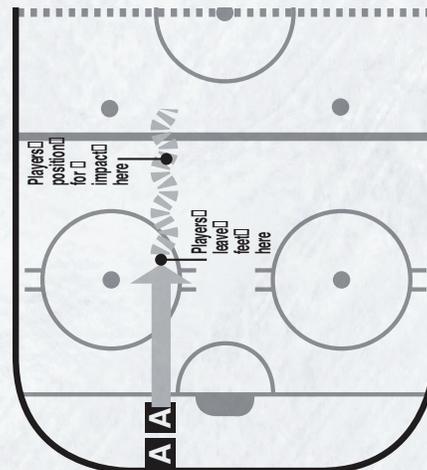
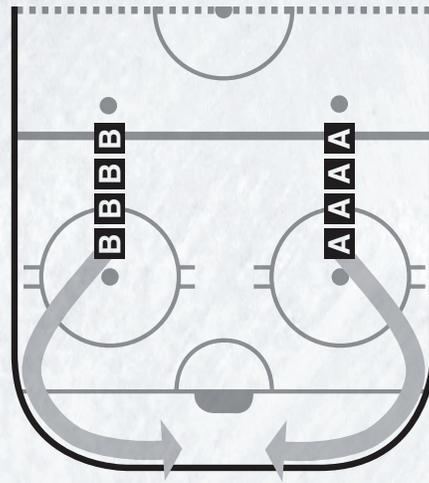
All of these, of course, are right answers. Players probably won't say "your head" as a possible answer, and you should congratulate the players for that.

Conclude your discussion by demonstrating the best way to cushion an impact with the boards: with both hands on the stick if possible, and with their arms out, creating a three-part "shock absorber." Players should try to absorb the impact over as much of their body as possible.

DRILL #3

1. Set up two lines of players (A and B) at the faceoff dots.
2. On the whistle, a player from each line skates at an angle toward the corner boards. The players should make contact with the boards and glass with their extended arms, forearms, side of body and legs, but with no head contact at all.

3. Players should alternate between lines (A) and (B). The speed at which the players hit the boards must be managed, depending on the skill level of the players. Proper head, arms and body position must be stressed.



Variation

From the goal line, players skate full speed toward the blue line. At the top of the faceoff circles, they should leave their feet and slide on their side, back or stomach. Have them imagine the blue line as an impact with the boards.

Players should pretend to slide into the end boards, using arms, knees, legs and skates to absorb the impact. Proper heads-up position must be stressed.

TAKING A CHECK

What players should do when they see it coming.

Since USA Hockey-sanctioned games do not include checking at some levels, this session might not be appropriate for all teams. But if you are coaching a younger team, you might still find the information useful as “body-contact” techniques, especially for less skilled skaters.

Preparing for a body check takes split-second timing. But how a player prepares for a check determines whether he or she will keep or lose the puck, or how quickly he or she will be back in the play. Quick reflexes and smart moves when a check is coming also lessen the chance of a head injury.

By this time, players will have some familiarity with the basics of “Heads Up Hockey.” So you might just ask them to see how many of these four basic safety techniques for taking a check they can come up with.

Heads Up – don’t duck. It’s just as important in taking a check as in any other impact.

Keep your head out of it. The more players can avoid impact with their heads, the more likely they are to come through safe and in control. They should take the impact with anything else first.

Know where your opponents are. As players become more experienced, and as they start thinking more about strategy and less about skating, their peripheral vision and overall awareness should start to improve. When they know where their opponents are, they’ll be less likely to get checked without any warning.

Skate through the check. Although it may seem safer to slow down or stop if a hit is about to happen, your players’ balance and momentum will be much better if they keep their legs moving and concentrate on skating right through the impact. They’ll not only avoid head injury, they’ll have a better chance of maintaining their balance and staying in the play.

And if they get in a situation in which they can’t skate through a check, players should keep their arms up, knees bent and, of course, their head up.

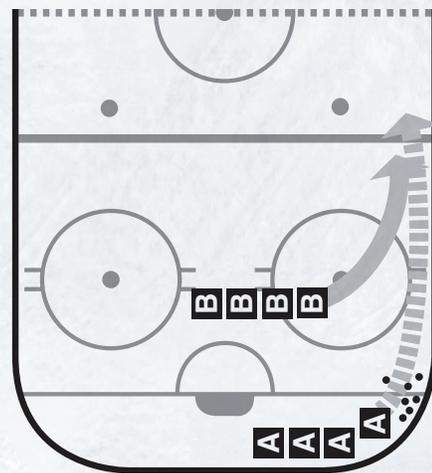
Be sure to cover these points:

- Keep your skates parallel to the boards.
- Move out of the area quickly.
- Keep your feet moving.
- Use your arms and legs as shock absorbers.
- Keep your feet apart, knees bent and have a low center of gravity.
- Do not make shoulder contact on the boards, if possible.

DRILL #4

Use this exercise to reinforce proper ways of giving and taking a check.

1. Set up a line of puck carriers (A) in the corner behind the goal line and one line of checkers (B) at the faceoff dot.
2. The puck carrier (A) moves up to the boards and skates through the check of the (B) player.
3. For the puck carriers, stress heads-up position, keeping the legs moving and the stick down.
4. For the checkers, stress contact with the shoulders, not the head, elbows, knees, stick or feet.
5. In this drill, players should alternate from puck carrier lines (A) to checking lines (B).



For best use of your ice time, set up the same drill in the other corner, too.

GIVING A CHECK

Separating the puck from your opponent, not separating your opponent from consciousness.

As with the previous session, this material may be less appropriate for younger age levels at which checking is not allowed, but the information is still valuable.

Hockey rules are specific about a legal body check: it's when a player checks an opponent who is in possession of the puck, by using his hip or shoulder from the front, diagonally from the front or straight from the side, and does not take more than two steps or strides in executing the check."

The point is, checks and body contact are not about intimidation and not about inflicting pain and injury. They're just one part of the game, along with skating, shooting, passing, and puck handling.

In preparing your team for this "*Heads Up Hockey*" session, start them thinking by discussing the checking they see in NHL games on TV. Do they find it exciting? (Definitely). Do they wish they could give a check like that themselves? (Probably).

Now invite them to imagine themselves on the receiving end of some of those spectacular NHL checks. Could they take it? Remind your players that the checks they see on TV are given and taken by world-class athletes in top form who have the experience and control to play physical hockey at that level.

As a coach, the caliber and sportsmanship of your team's play is in your hands. We hope you'll promote safe, legal checking for your players. We also hope you'll insist on clean, legal checking from opposing teams, too. It's another way of keeping your team safe without suffering any competitive disadvantages.

Checking from Behind

It's illegal. And it's extremely dangerous. Even a light hit from behind could inflict a severe head or neck injury.

Be sure to tell your players that no matter how intense the game becomes, they must not hit another player from behind, ever. And, of course, checking from behind exposes your team to the possibility of a major penalty.

A Word About Reckless Play: DUMB!

In the heat of the game, players can occasionally get so psyched up they forget everything they've learned, and get into a play they have no chance of finishing safely.

Some players drive to the net so fast they just can't stop, making a dangerous collision practically a sure thing.

You know this is bad hockey and that it is dangerous hockey. The sad truth is, many hockey injuries are "self-inflicted" by players skating way past their limits and "going for it" at all costs.

Be sure to tell your team that reckless play like this does nobody any good. It rarely results in a goal or a good play, and often ends up as a penalty, an injury or both.

PROTECTIVE HOCKEY EQUIPMENT

The Superman Syndrome

Avoid the "Superman Syndrome" on the ice, and get the best use out of today's protective equipment.

As good as it is, there isn't any protective equipment that can keep a player from getting a serious spinal injury in a head-on collision with his head down.

But protective equipment can prevent or reduce concussions, as well as facial, mouth and other injuries, so we've included guidelines for the proper care and maintenance of protective equipment.

Look! Up in the sky! It's a bird! It's a plane...

We spoke of reckless play as being "dumb hockey," and it is. One factor leading to reckless play may actually be the "can't get hurt" feeling some players get as a result of wearing protective equipment.

So it's worth your while to tell your players that the purpose of their protective equipment is to protect them from sticks, pucks, skates, and other objects, not to allow them to skate recklessly.

Maintaining Protective Equipment

Helmet

- Make sure all helmets are HECC-certified.
- The fit should be snug on the top, back and sides of the head.

- All padding and manufacturer's hardware should be in place.
- No cracks! Throw out a cracked helmet immediately; it's not only ineffective, it's dangerous.
- The neck strap should be working and comfortable.

Facial Protection

- Use HECC-certified equipment only.
- If it's a plastic shield, no cracks or scratches are allowed.
- If it's a wire cage, no bars can be bent or missing and the wire coating must be intact.
- The chin cup should be in place, and the chin should sit comfortably in it.
- All straps and snaps should be in place and working.

Mouth Guard

- Follow the manufacturer's instructions for proper fit.
- Make sure your breathing is not inhibited when in place.

GETTING YOUR TEAM IN SHAPE

Head and Neck Exercises

You know the value of regular exercise and general fitness to your players. In addition, a strong neck can actually help prevent head injuries. We hope you'll include these neck exercises in your team's loosening up and strengthening routine, as a valuable addition to their "Heads Up Hockey" program.

Players should complete this full routine five times a week.

Flexibility Exercises

As a warm up exercise and to obtain full mobility, isotonic exercises are repeated five times each in a sitting or standing position. Players' shoulders are down and back in the starting position. Keep them there.

1. Drop your head sideways and hold it for a slow count of six. Push against the tension, but not too hard.

2. Now drop it to the other side for a slow six count.
3. Turn your head to one side for a slow count of six, pushing against the tension.
4. Now reverse it and push to the other side. That's one rep of this exercise. Repeat it four more times.

Strengthening Exercises

Strengthening exercises are repeated five times each in a sitting position. They may be done individually or with a partner of similar size and strength who resists the movements.

1. Put your hands together behind your head. Press against your hands for a slow count of six.
2. Now keep pushing with your head, but ease your hand's resistance to tilt your head back slowly.
3. Put one arm up with your hand over your ear. Try to turn your head to one side, but resist with your hand. Hold for a count of six.
4. Now do the same on the other side for a slow count of six.
5. Now try to drop your head sideways, but resist for a slow count of six.
6. Change sides. Press and hold for a slow six count again.
7. Put both arms in front with your head in your hands. Push with your head and resist with your hands for a slow count of six.
8. Use the same position, but let your head move forward against your hands, slowly. Now repeat this whole exercise four more times.

WHAT TO DO IF A PLAYER GETS HURT

You're a coach, not a doctor. But sometimes you need to make a medical decision on the spot.

One of those situations is deciding whether or not to take a player out of a game after he or she has had a head impact. In the case of a concussion, your judgment is important, because even a mild concussion can have serious consequences.

Identifying and Dealing with a Spinal Injury

In the case of a potential spinal injury, your immediate care and attention can make a big difference in the player's well-being until medical care arrives.

If you think a player may have sustained a spinal injury, your immediate role is to get help and keep the player calm and immobile. After a spinal impact, look for these symptoms:

- pain in the area of the injury
- buzzing or tingling in the arms and/or legs
- loss of movement in the arms or legs
- radiating pain in the arms or legs

After calling for immediate medical help, give care as follows:

- Ensure adequate airway and breathing.
- Observe the ABC's: airway, breathing and circulation.
- Reassure the player.
- Do not allow the player to move. Instruct the player not to move, and immobilize him or her to prevent any motion.
- Keep the player warm.

Identifying and Dealing with a Concussion

The evaluation of an athlete with a suspected concussion should be prompt and thorough. All concussed athletes should be **cleared for return to play by a sports medicine professional**.

When a player shows ANY symptoms or signs of a concussion:

- The player should not be allowed to return to play in the current game or practice: "When in doubt, sit them out!"
- Athletes may suffer a severe concussion without getting "knocked out" (loss of consciousness).
- The player should not be left alone, and regular monitoring for deterioration is essential.
- The player should be medically evaluated after the injury.
- Return to play must follow a medically supervised stepwise process.
- A player should never return to play when symptomatic.

Symptoms

- unaware of situation
- confusion
- amnesia
- loss of consciousness
- headache
- dizziness
- nausea
- loss of balance
- flashing lights
- ear ringing
- double vision
- sleepiness
- feeling dazed

Signs

- loss of consciousness
- altered mental status
- poor coordination
- slow to answer
- poor concentration
- nausea or vomiting
- vacant stare
- slurred speech
- personality changes
- inappropriate emotions
- abnormal behavior

Return to play after a concussion follows a stepwise process:

1. no activity, complete rest
2. light aerobic activity: exercise such as walking or stationary cycling
3. sports-specific training – skating
4. non-contact training drills
5. full-contact training after medical clearance
6. return to competition

* Proceed to the next level if free of symptoms at the current level

* If any symptoms or signs occur, drop back to the previous level and progress to the next level again after 24 hours

SUMMARY

You can obtain a full multimedia kit including all elements of the “*Heads Up Hockey*” program by contacting USA Hockey directly at 719-576-8724, by logging on to USAHockey.com, or emailing us at usah@usahockey.org.

LEARN MORE

Click on the following link(s) for more information on the topics covered in this chapter. (*Internet access is required*).

www.usahockey.com/page/show/1011484-heads-up-hockey