

SONH CANDLEPIN BOWLING GUIDE



Candlepin lanes at a bowling alley in [Woburn, Massachusetts](#)

Candlepin bowling is a variation of [bowling](#) that is played primarily in the [Canadian Maritime provinces](#) and the [New England](#) states of the [United States](#).



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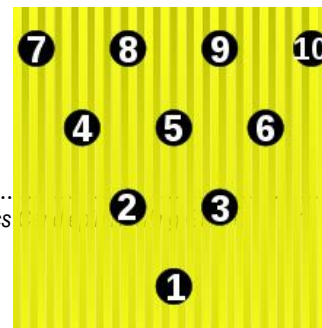
[Comparison to tenpin bowling](#)

An early 20th century four-lane candlepin alley in [Windsor, Vermont](#), United States, about 1910—note also the presence of stored [tenpins](#) and [duckpins](#) on a shelf behind the pit areas.



Candlepin bowling was developed in 1880 in [Worcester, Massachusetts](#), by Justin White, a local bowling center owner, some years before both [the standardization of the tenpin bowling sport in 1895](#) and the invention of [duckpin bowling](#), said by some sources to have been invented the same year. As in other forms of bowling, the players roll balls down a wooden pathway ("lane") to knock down as many pins as possible. The main differences between candlepin bowling and the predominant [tenpin bowling](#) style are that each player uses three balls per frame, rather than two (see below); the balls are much smaller (11.43 cm or 4½ in diameter) with each ball weighing as much as only one candlepin and without finger holes; the pins are thinner (hence the name "candlepin"), and thus harder to knock down; and the downed pins (known as "wood") are not cleared away between balls during a player's turn. Because of these differences, scoring points is considerably more difficult than in tenpin bowling, and the highest officially sanctioned score ever recorded is 245 out of a possible 300 points.^[1] This score was first achieved in 1984 by Ralph Semb, who is the President of the International Candlepin Bowling Association as of 2016. The record was matched on May 13, 2011 by Chris Sargent of [Haverhill, Massachusetts](#), at the Metro Bowl Lanes candlepin center in [Peabody, Massachusetts](#), and accepted by the ICBA.^[2]

Game play^[edit]





Candlepin bowling pins are specified as 15.75 inches (40.0 cm) high, have identical ends, and are almost 3 inches (76 mm) in diameter at the center.

Numbering of a "full rack" of ten candlepins.

Unlike in [tenpin bowling](#), fallen or "dead wood" candlepins are *not* cleared away between balls during a player's turn.

A candlepin bowling lane, almost identical to a tenpin bowling lane, has an approach area of 4.3 to 4.9 meters (14 to 16 ft) for the player to bowl from, and then the lane proper, a maple surface approximately 1.05 metres (41 inches) wide, bounded on either side by a gutter (or "channel", or trough.) The lane is separated from the approach by a "foul line" common to almost all bowling sports, which must not be crossed by players. At the far end of the lane are the pins, 60 ft (18 m) from the foul line to the center of the headpin (or pin #1), placed by a machine called a [pinsetter](#) which occupies space both above and behind the pins. Unlike a tenpin lane, which has a level surface all the way from the foul line end of the lane's approach to the back end of the lanebed's "pin deck", a candlepin lane has a hard-surfaced "pin plate" where the pins are set up, with the pin plate depressed $\frac{7}{16}$ inch (11 mm) below the lanebed forward of it. The pin plate can be made from hard-surfaced metal, "phenolic", "high density plastic", or a "synthetic" material. Behind the pin plate area of a candlepin lane is a well-depressed "pit" area for the felled pins and balls to fall into. A heavy rubber backstop, faced with a black curtain, catches the flying pins and balls so they may drop into the pit. Generally there is seating behind the approach area for teammates, spectators, and score keeping.



The candlepins themselves are 15 $\frac{3}{4}$ inches (40 cm) tall, have a cylindrical shape which tapers equally towards each end (and therefore having no distinct "top" or "bottom" end, unlike a tenpin), giving them an overall appearance somewhat like that of a candle, and have a maximum weight of 2 lb 8 oz (1.1 kg) apiece.^[3] Candlepin bowling uses the same numbering system and shape for the formation within the ten candlepins are set, as the tenpin sport does. Also, as in tenpin bowling, due to the spacing of the pins (12 inches or 30 centimetres, center to center), it is impossible for the ball to strike every one. However, while in tenpin a well-placed ball (usually between the head pin and the 2 or 3 pin) may knock down all ten pins (a "strike" if on the first ball in a frame) from the chain reaction of pin hitting pin, in candlepins the smaller thickness of the pins makes throwing a strike extremely difficult. In order to count, the pin must be knocked over entirely; in unlucky circumstances, a pin may wobble furiously, or, even more frustratingly, be "kicked" to the side by several inches, yet come to rest upright, thus not being scored (and not be reset to its original position for any throws that remain, though it may of course still be knocked over by subsequent balls). It is even possible [for a toppled pin to bounce off a side "kickback", and return to a standing position on the lane's pin deck](#) in the candlepin sport. However, in the event that a fallen pin returns to a standing position, the pin is still counted as fallen and is played as live wood.^[3]



In addition to the foul line for the bowler themselves, there is a line 10 feet (3.0 m) down the lane from the foul line; this is the **lob line**, and the ball must first contact the lane at any point on the bowler's side of it, be it on the approach or the first ten feet of the lanebed. Any "airborne" ball delivery not making contact with the approach or lanebed short of the "lob line" constitutes a violation of this rule, and is termed a **lob** with any pins knocked down by such a ball not counting — and such pins are not reset if the lobbed ball was not the third and last shot for that player in that box.



Also, a third line, centered 61 cm (24 in) forward of the head pin (number-1 pin) spot is the **dead wood line**, which defines the maximum forward limit that any toppled pins ("wood") can occupy and still be legally playable ("live wood"). This lane specification essentially results in the presence of three foul lines, more than in any other bowling sport.

The ball used in candlepins has a maximum weight of 2 lb 7 oz (1.1 kg), and has a maximum diameter of 4.5 in (11 cm), making it the smallest bowling ball of any North American bowling sport.^[4] The nearly identical weight of the ball, when compared to that of just one candlepin, tends to cause rapidly delivered balls to sometimes bounce at random when impacting a full rack of pins on the first delivery of a frame, and sometimes when hitting downed "dead wood" pins on subsequent deliveries.

A game of candlepin bowling, often called a **string** in New England, is divided into ten rounds, each of these rounds being most commonly referred to as a **box**, rather than a "frame" as in tenpin bowling. In each normal box, a player is given up to three opportunities to knock down as many pins as possible. In the final box, three balls are rolled regardless of the pincount, meaning three strikes can be scored in the 10th box.

One unique feature of the candlepin sport is that fallen pins, called **wood**, are *not* removed from the pin deck area between balls, unlike either the tenpin or duckpin bowling sports. The bowler, according to the rules of the sport—before delivering the second or third ball of a box—must also wait until all of the wood on the deck comes to a rest. Depending on where the fallen pins are located on the pindeck and their angle(s) after all movement of them ceases, the wood can be a major help, or obstacle—partly due to the ball having nearly the same weight as one candlepin—in trying to knock down every single standing pin for either a spare or "ten-box" score in completing a round.

In each of the first nine boxes, play proceeds as follows: The first player bowls his first ball at the pins. The pins he knocks down are counted and scored. Then the player rolls a second and a third ball at any remaining targets. If all ten pins are knocked down with the first ball (a **strike**), the player receives ten points plus the count on the next two rolls, the pins are cleared, a new set placed. If all ten pins are knocked down with two balls (a **spare**), the player receives 10 points plus the count of the next ball, pins are cleared and reset. If all three balls are needed to knock all the pins down, the score for that frame is simply **ten**, and known in New England as a **ten-box**. If more than one player is playing on the same lane at the same time, bowlers will typically roll two complete boxes before yielding the lane to the next bowler.

In the tenth box, play is similar, except that a player scoring a strike is granted two additional balls, scoring a spare earns one additional ball. Three balls are rolled in the tenth box regardless.^[5]

In league play, a bowler may roll two or five boxes at a time, depending on the rules of the league. The five box format is sometimes called a "speed league," and this format is also typical for tournament play. When a bowler is rolling blocks of five boxes, each period is typically called a "half."

Fouls

A foul (scored by an F on some computer scoring systems) refers to a ball that first rolls into the gutter and then strikes deadwood (felled pins resting in the gutter) or hops out of the gutter and strikes a standing pin, a "lob"-bed ball that touches neither the approach, nor lane in the three meters' distance of lanebed before the lob line, or as in tenpins and duckpins, a roll made by a bowler's foot crossing over the foot foul line shared by nearly all bowling sports. Special scoring comes into play.

A foul always scores zero (0) pinfall for that ball's delivery. A player may reset the pins after a foul on the first or second ball provided no pins have legally been felled in that box. Therefore, if on the first ball there is a foul or zero, and on the second ball the bowler fouls and knocks down pins, the pins may be reset, allowing the bowler an opportunity to score a ten box on their third ball. Knocking down all ten pins after resetting immediately following a foul in the first ball results in a spare. Fouling on all three attempts scores a zero box.



If the first ball knocked down at least one pin, the rack can not be reset because of a subsequent foul. Those pins felled by a foul ball (a ball rolled into the gutter, a lobbed ball, a ball delivered by a bowler over the foot foul line)—whether standing, playable wood, or pins in the gutter—remain down and reduce the maximum number of pins to be counted for the box. Therefore, if there are six pins standing after the first ball, a foul on the next ball that manages to knock down the remaining six pins means that the frame is finished, with a score of 4. However, if the foul ball knocked down only some of the six standing pins, a third ball may still be rolled to attempt to knock down the remaining upright pins. In this example, the raw score might appear to be "4 4 2 = X", but after adjusting for the foul second ball, the true score is "4 F 2 = 6". Similar logic holds when rolling two good balls and fouling in the third attempt: the frame is over and only the pins felled in the first two attempts are recorded for the score for that box.^[3]

While some candlepin alleys have automated scoring systems, and thus know when to clear and reset pins, other alleys, especially older ones have a button, or floor-mounted foot pedal switch, which players must press to manually initiate the clearing and resetting of pins. [Automatic pinsetters](#) were introduced in the late 1940s; prior to this, as with ten-pin, pins were set by workers called "pinboys".

Scoring

One point is scored for each pin that is knocked over. So, in a hypothetical game, if player A felled 3 pins with their first ball, then 5 with their second, and 1 with the third, they would receive a total of 9 points for that box. If player B knocks down 9 pins with their first shot, but misses with their second and third, they would also score 9.

In the event that all ten pins are felled by any one player in a single box, by no more than two throws (just as in tenpins) bonuses are awarded for a **strike** or **spare**. A strike is achieved with just the first delivery downing all ten pins, with a spare needing two throws, again just as in the tenpin sport. If all ten pins are felled by rolling all three balls in a box, the result is a **Ten** or **ten-box**, usually marked by an **X** (as in the Roman numeral for ten) but no additional points are awarded. (In tenpin bowling, a strike is often scored with an X).

The maximum score in a game is 300. This is scored by bowling 12 strikes: one in each box, and a strike with both bonus balls in the 10th box. In this way, each box will score 30 points (see above: scoring: strike).



This scoring system, except for the scoring sheet's appearance and the graphic symbols used to record strikes, spares and 10-boxes,^[6] is identical to that of [duckpins](#), as it is the other major form of bowling that uses three balls per frame.

Scoring sheet

An example scoresheet:

The candlepin scoring sheet is different from either tenpins or duckpins, in that it is usually oriented vertically, with two columns of squares in a two-square-wide, ten-square-tall arrangement to score one string for one player. The left-hand column is used to detail the "per-box" score, with the cumulative total being recorded down the sheet as each box is rolled in the right-hand column of squares, in a top-down order from the first box to the tenth.

Spares and strikes are also marked uniquely in candlepins. Spares are recorded in a box by coloring in the left upper corner of the appropriate left-hand square (using a triangular shape to "fill-in the corner"). If a strike is recorded, opposing corners of the left-hand square are similarly colored in, while leaving sufficient space between the "filled-in" opposing corners, to record the score from the two succeeding balls' "fill"

 9	19
X	29
 4	43
7	50
X	60



total for the strike. A common (albeit unofficial) practice is to mark a strike on a strike's bonus ball (double strike) by shading in the remaining two corners of the first strike.

Strike

When all 10 pins are knocked down with the first ball (called a strike), a player is awarded 10 points, plus a bonus of whatever they score with their next 2 balls. In this way, the points scored for the two balls after the strike are scored twice.

Example:

Box 1, ball 1: 10 pins felled (strike)

Box 2, ball 1: 3 pins felled

Box 2, ball 2: 6 pins felled

Box 2, ball 3: 1-pin felled

The total score from these throws is: $10 + (3+6) + 3 + 6 + 1 = 29$

A player who scores multiple strikes in succession would score like so:

Box 1, ball 1: 10 pins fell (strike)

Box 2, ball 1: 10 pins fell (strike)

Box 3, ball 1: 4 pins fell

Box 3, ball 2: 2 pins fell

Box 3, ball 3: 2 pins fell

The score from these throws is:

- Box one... $10 + (10 + 4) = 24$

- Box two... $10 + (4 + 2) = 16$

- Box three... $4 + 2 + 2 = 8$

TOTAL = 48

A player who bowls a strike in the 10th (final) box is awarded two extra balls, so as to allow for their bonus points. If both these balls also result in strikes, a total of 30 points ($10 + 10 + 10$) is awarded for the box.

Spare

A "spare" is awarded when all pins are knocked down with a fair ball in or by the second ball roll in the same frame. For example, a player uses the first two balls of a box to clear all ten pins. A player achieving a spare is awarded 10 points, plus a bonus of whatever they score with their next ball (only the first ball is counted).

Example:

Box 1, ball 1: 7 pins fell

Box 1, ball 2: 3 pins fell (spare)

Box 2, ball 1: 4 pins fell

Box 2, ball 2: 2 pins fell

Box 2, ball 3: 1-pin fell

The total score from these throws is: $7 + 3 + 4(\text{bonus}) + 4 + 2 + 1 = 21$

A player who bowls a spare in the 10th (final) box, is awarded one extra ball so as to allow for their bonus points.



Ten

A Ten (known as "**Ten-box**") is when all the pins are knocked down after the third ball of a box. A player achieving a Ten is awarded 10 points, but without any bonus for the following ball.

Example:

Box 1, ball 1: 7 pins felled

Box 1, ball 2: 2 pins felled

Box 1, ball 3: 1-pin felled

The total score from these throws simply is: $7 + 2 + 1 = 10$ ^[6]

Calculating scores

Correct calculation of bonus points can be a bit tricky, especially when combinations of strikes and spares come in successive boxes. In modern times, however, this has been overcome with automated scoring systems. When a scoring system is "automated", the bowler only has to bowl. It keeps score and will reset the pinsetter after three balls are thrown or all 10 pins have been knocked down. If a scoring system is "semiautomated", the bowler has to enter the score but the computer will keep track of it. The bowler needs to press a button at the end of the ball return to receive a new "rack" of pins.

Jargon

Candlepin bowling uses its own colorful jargon to refer to the many scenarios that can arise in a game, with most of the terms denoting different combinations of pins left standing after the first ball has been rolled. Examples of these terms include:^[7]

- **Head pin:** The 1-pin, which is in front of the other pins.^[7]
- **King pin:** The 5-pin, which is in the center of the pins, and directly behind the head pin.^[7]
- **Wood:** The fallen pins lying between the standing pins, often strategically used to knock down multiple standing pins which can be far apart.
- **Deadwood:** Fallen pins lying in the gutter, or on the lane either touching, or to the bowler's side of the Deadwood Line. Deadwood on the lane must be removed before the bowler may roll their next ball, while Deadwood in the gutter is left in place. If a delivered ball should strike any Deadwood prior to hitting any wood or standing pins on the lane, then that ball is considered "dead" and any pins felled by it do not count to the bowler's score.
- **Additional Info on Wood and Deadwood:** In certain circumstances, a pin can be both Wood and Deadwood at the same time. For example, a pin may be on the pindeck, or in the gutter, but lying perpendicular to the lane. The edge of the lane divides the pin between Wood and Deadwood. If a rolled ball makes first contact with that pin while the ball is still on the lane, the shot is deemed legal, the bowler gets credit for any additional felled pins. If the rolled ball makes first contact with that pin after leaving the lane surface and heading into the gutter, the shot is deemed foul, and any additional felled pins on that roll will not count toward the bowler's score.
- **Mark:** Spare or strike.
- **Four Horsemen:** Four pins in a diagonal line, from the head-pin outward;^[7] if the 1–2–4–7, it is known as "Four horsemen, left side," and if the 1–3–6–10, it is known as "Four horsemen, right side." The usual tenpin term for a spare leave of this kind is a "picket fence" (used for a different spare leave in candlepins) or "clothesline".
- **Caliri:** (unofficial) The Four Horsemen left side (1–2–4–7) plus the 9-pin, or the Four Horsemen right side (1–3–6–10) plus the 8-pin. Named after bowler Bob Caliri, and similar to any one of the "washout" spare leaves in tenpin bowling.



- **Spread Eagle:** A [split](#) configuration consisting of the 2–3–4–6–7–10, caused by the first shot striking the head pin too directly, leading to a failure to scatter the pins. [\[7\] Video of the "spread eagle" being left, then converted](#)
- **Diamond:** Four pins that form a diamond-shaped configuration, [\[7\]](#) either the 2–4–5–8, known as "left-side diamond," the 3–5–6–9, known as "right-side diamond", or the 1–2–3–5, known as the "center diamond" (this same configuration, for any of the three configurations mentioned, is usually referred to as a "bucket" in standard ten-pin bowling, and while it is very difficult to convert into a spare in candlepin bowling, in ten-pin bowling a spare is usually made from it by an experienced bowler).
- **Half Worcester:** Perhaps the most distinctive term used in the game. This results when the first shot strikes either the 2-pin or 3-pin too directly, and knocks down (or *punches out*) only that pin and the one immediately behind it; [\[7\]](#) when only the 2- and 8-pins fall it is a "Half Worcester Left", and when only the 3- and 9-pins fall it is a "[Half Worcester Right](#)". According to legend, the term was coined when a team from Worcester and a team from Boston were competing in the semifinal round of a statewide tournament held sometime in the 1940s; late in the last match of the round, needing a mark, one of the bowlers on the Worcester team "punched out" only two such pins with his first ball, prompting a member of the Boston team to taunt him by saying, "You're halfway back to Worcester!" [\[8\]](#) It is sometimes said that a player will get "one a game" referring to the Half Worcester.
- **Full Worcester:** Knocking down 2–3–8–9, or two Half Worcesters.
- **Quarter Worcester:** Another term derived from the Half Worcester, knocking down half as many pins—either just the 2-pin or just the 3-pin.
- **Picket Fence:** Rare shot leaving the whole back row standing—7–8–9–10.
- **Hi-Low-Jack:** This term refers to the 1-, 7-, and 10-pins, which are on the three corners of the triangle. [\[7\]](#) Trying to knock down all three in one shot (with no wood) is sometimes a contest as part of a televised candlepin bowling program.
- **Goal posts:** when after the ball is thrown, only the 7 and 10 pins remain standing on the lane. If there is no wood, it is the hardest two-pin combination to completely knock down on one ball.
- **Woolworth:** leaving the 5 and 10 pins. Named after the [F.W. Woolworth Company](#) five-and-dime stores.
- **Backdoor Strike:** A strike in which the 1-pin is the last to fall.
- **Hammer:** A hard-hit, fast-moving strike.
- **Triple:** A three-game series. When spoken, it follows a rough total of the series, such as "500-triple," meaning the bowler rolled 500 or more for three games. Triple can also refer to three consecutive Strikes rolled by a bowler – other forms of Bowling would call this a "Turkey".



Candlepin Bowling Tips

THE APPROACH

To find your starting position, stand in the center of the approach with your back to the pins with your heels approximately 2 to 3 inches from the foul line. Take three regular size steps forward and turn and face the pins. This is your starting spot! Begin your approach from this spot each time you bowl. After you have developed your style and learned some techniques of bowling, you may want to adjust your starting spot slightly.

You must not finish on or beyond the foul line. In fact, the bowler should not end up closer than 2 to 4 inches from the foul line. This will leave some room for error. When you have selected the proper location to start from, you should stand with your feet together. Slightly more than half your weight should be supported by the leg on the side of your throwing arm. This provides for better balance since you don't have to shift too much weight from one leg to the other in order to start your delivery in a well balanced manner. For new bowlers this helps to ensure you start off with the correct foot.

THE DELIVERY

The three step approach should be promoted whenever possible. The three step approach is the most simple and easily learned and is the one where everything can be done naturally. It is the same style that we use every day when walking or running. In other words, the arms follow the leg on the opposite side and, as a result, better balance at the end of the delivery assured. There are, of course, other deliveries, such as the two, four and five step approaches. Both the four and five not only create poor balance but are likely to cause the bowler to go over the foul line because of the speed that is generated during the approach. The two step approach does not allow for good balance and should be discouraged whenever possible. The delivery should be started from an upright position (do not lean way over) and should be completed with a combination of the legs and back bent sufficiently to allow the ball to be released just slightly above the lane. This will allow a smooth delivery, does not damage the lane and will improve accuracy. Your head must be held upright with your eyes on the pins. In other words, don't let your head incline sharply toward the side the ball is being delivered from. Remember, speed is not the most important ingredient, accuracy is. If speed is given more importance than accuracy the result will be inconsistency and frustration when easy shots are missed. If the correct approach is used, and the ball is delivered properly and accurately, the additional speed is rarely ever needed to get a good break, convert a spare or to get a strike. Later, with experience, speed will come automatically. Basically, the ball should be released with the middle finger pointing at the pin being aimed for. However, the speed of the ball could cause this to be modified slightly to eliminate too much of a curve. The size of the bowler's hand should also have a bearing since control will be affected if the ball slips. Some beginners will find it difficult in some cases to master the three step delivery, particularly when it comes to the proper coordination of the arm and leg. When instructors or coaches become aware that the person is likely to have difficulty, it is strongly recommended that the learner is not allowed to have a ball in his or her hand during the first few practice deliveries. The most effective way is to have the beginners go through the delivery several times with the instructor or coach then a few times alone. Only then should they be allowed to try it with a ball.

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BALL- HAND POSITION



The ball should be placed in the hand in such a way that it does not
fit firmly against the palm. Spread your fingers to a comfortable
position evenly around the ball with thumb up. This will place the
ball in your hand similar to that illustrated. It is very important to