



# Study Guide – 6 – Vertical Jumps Common Rules HJ/PV

## Study Guide 6 – Vertical Jumps – Common Rules - High Jump/ Pole Vault Learning/Performance Objectives

### Junior Official Program Study Guidelines

The purpose of the Study Guides in this program are to help you acquire the knowledge needed to be able to understand and create a brief statement of the information that you will need for course completion and future knowledge. You might think of this Study Guide as a mini-outline to the different official positions that are contained in Track and Field competitions. Consider this Study Guide as a condensed version of all of the important information that you will need to complete the Junior Officials Program successfully.

Each Officials duties, skills and behaviors are contained in the 17 different Study Guides offered in this program. These Study Guides are a combination of

- Adopted USATF 2020 Competitions Rules.
- Best Practices (those skills that describe “what works best” in a particular situation or environment). These Study Guides are data supported successes and researched supported over time, as offered by Track & Field officials in the quest for accountability for reliable methods.
- USATF Code of Ethics
- USATF Professional Guidelines

### Procedures

Once you have the Study Guide in front of you, do more than just read it. Take the time to look at the material to understand what you will be asked to do. Start by reading the description to formulate a big-picture idea of what your Mentors assessment will look like. Then, review the list of concepts.

Quizzing yourself is a highly effective study technique. Make a copy of the Mentors Checklist and carry it with you to the meets so you can review the questions and answers periodically throughout the day and across several days/meets. Identify the questions that you don't know and quiz yourself on only those questions. Say your answers aloud.

The important skills needed in this Guide correspond to the Learning and Performance Objective numbers that begin with the abbreviation **VJCR (Vertical Jumps Common Rules)**. (**VJCR1-**)

Ask questions of your Mentors, they are there to answer your questions and guide you to learning and performing as a USATF official.



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Good Luck to you on your journey to become a USATF Certified Official

### Skills required to Advance to Association Level

Result Recording
Flight Coordinating
Five Alive Procedures
Timing
Setting Standards (Pole Vault Only)
Replacing the Bar
Standards Board (Pole Vault Only)
Bar Judge
Determining Fouls
Pit Management
Basic Rule Interpretation
Pole Inspection (Youth Pole Vault Only)
Weigh-In (Youth Pole Vault Only)
Event Safety
All Apprentice Level Requirements

### **USATF RULE 181 – VERTICAL JUMPS - HIGH JUMP AND POLE VAULT (VJCR1)**

#### **The following subdivisions shall apply to both the High Jump and the Pole Vault:**

1. The initial height of the crossbar and the subsequent heights to which the crossbar shall be raised shall be determined by the Games Committee, and shall be announced to the competitors before the commencement of the competition. In jump-offs to decide ties for first place, the bar will be raised and lowered in accordance with Rule 181.9(d).

**NOTE:** *For Youth Athletics exception see Rule 302.5(o).*

2. All measurements must be made in accordance with Rule 148, perpendicularly from a point on the same level as the takeoff to the lowest part of the upper side of the bar. Any measurement of a new height shall be made before competitors attempt such height. A new measurement shall also be made when a new crossbar is substituted for a broken one. In all cases of attempts at record heights, the judges shall check the measurement of the bar when the bar has been placed at the record height and they must re-check the height before each



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subsequent record attempt if the bar has been displaced for any reason or touched since last measured.

**NOTE:** *Judges should ensure, before commencing competition, that the underside and front of the crossbar are distinguishable, and that the bar is always replaced with the same surface uppermost and the same surface to the front.*

3. No marks shall be placed in any pit or landing area.
4. In scratch competitions, the competitors shall compete in the order drawn by lot, except as permitted under Rule 180.10 (a), (b) and (c). In handicap competitions, the competitor with the greatest allowance shall make the first trial, and so on. Each competitor shall have the opportunity to make an attempt, or to forego such opportunity in the order drawn; those who have failed shall have a second opportunity in the same order and those who have failed a second time shall have a third opportunity in the same order.
5. In non-championship competition, at the discretion of the Games Committee, vertical jump competitions may be held in a different format to that provided under this rule, including limiting the total number of heights or trials which a competitor may attempt.
6. A competitor shall have the discretion to commence jumping or vaulting at the starting height or at any subsequent height. A competitor who forgoes a trial at a height thereby forfeits the right to jump again at that height. Such competitor may, however, jump at that height in a jump-off to break a tie for first place. Three consecutive failures, regardless of the height at which such failures occur, disqualifies the competitor from further competition except in the case of a jump-off to break a tie for first place. If a competitor is not present when all other competitors who are present have completed the competition, the Referee shall deem that such absent competitor has forfeited the right to continue in the competition once the period for one further trial has elapsed.

**NOTE:** *The effect of this Rule is that a competitor may forego second or third attempts at a particular height (after failing the first or second time) and still jump or vault at a higher height.*

7. Unless there is only one competitor remaining who has won the competition:
  - a. (a) The bar shall never be raised by less than 2cm in the High Jump and 5cm in the Pole Vault after each round; and
  - b. (b) The increment of the raising of the bar shall never increase.
  - c. (c) A competitor who has won the competition is entitled to continue jumping or vaulting until he/she has forfeited the right to compete further. Notwithstanding



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the provisions of this Rule, the heights to which the bar is to be raised shall be decided after consulting the competitor, except in combined events competition.

**NOTE:** *For Combined Events, see Rule 200.6.*

8. When it is clear that the bar has been displaced by a force not associated with the competitor (e.g., a gust of wind)
  - (a) If such displacement occurs after the competitor has cleared the bar without touching it, the attempt shall be considered successful, and 2020 USATF Competition Rules - 91
  - (b) If such displacement occurs under any other circumstances, a new attempt will be awarded.

**NOTE:** *It is a foul if the crossbar is displaced by the pole hitting the crossbar unless in the judge's opinion, an effort was made by the competitor to push the pole away from the crossbar when the athlete released the pole.*

### **USATF Rule 143.3 – Athletic Attire (VJCR2)**

3. (a) A competitor may compete in bare feet or with footwear on one or both feet. The purpose of shoes for competition is to give protection and stability to the feet and a firm grip of the ground. Such shoes, however, must not be constructed so as to give the competitor any unfair assistance or advantage.

**NOTE 1:** *Adaption of a shoe to suit the characteristic of a particular competitor's foot is permitted if made in accordance with the general principles of these Rules.* **NOTE 2:** *Where evidence is provided to USATF that a type of shoe being used in competition does not comply with the Rules, USATF may refer the shoe for study and if there is non-compliance may prohibit such shoes from being used in competition.*

- (b) The sole and the heel of the shoes shall be so constructed as to provide for the use of up to 11 spikes. Any number of spikes up to 11 may be used, but the number of spike positions shall not exceed 11.

**NOTE:** *For Youth Athletics Javelin exception see Rule 302.5(f).*

- (c) When a competition is conducted on a synthetic surface, that part of each spike which projects from the sole or heel, must not exceed 9mm, except in the High Jump and Javelin Throw, where it must not exceed 12mm. If the facility operator mandates a lesser maximum, this shall apply. For non-synthetic surfaces, the maximum length of spike shall be 25mm. Each spike must be constructed so that it will, at least for the half of its length closest to the tip, fit through a square sided 4mm gauge.



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**NOTE:** For Cross Country competitions, the entry material or the Games Committee may allow the use of an increased spike length.

4. (d) The sole and/or the heel may have grooves, ridges, indentations, or protuberances, provided these features are constructed of the same or similar material to the basic sole itself.
5. (e) In the High Jump and Long Jump, the sole shall have a maximum thickness of 13mm. In the High Jump, the heel shall have a maximum thickness of 19mm. In all other events, shoes may be of any thickness.
6. (f) Athletes may not use appliances, either inside or outside the shoe, which will have the effect of increasing the thickness of the sole above the permitted maximum, or which can give the wearer any advantage which would not be obtained from the type of shoe described in the previous paragraphs. The thickness of the sole shall be measured as the distance between the inside top side

### Placing - High Jump and Pole Vault: (VJCR3)

10. If two or more competitors have the same best heights, the procedure to decide places is the following:

1. (a) The competitor with the lowest number of jumps at the height which was their best height in the competition shall be awarded the higher place.
2. (b) If applying (a) will not decide, the competitor with the lowest total of failures throughout the competition up to and including the height last cleared shall be awarded the higher place.
3. (c) If applying (b) will not decide, the competitors involved shall be awarded the same place unless it concerns first place.
4. (d) If it concerns first place, the competitors tying shall jump-off, described as follows, unless otherwise decided either in advance according to the Technical Regulations applying to the competition, or before the start of the event by the appropriate Referee. If no jump-off is held, including where the relevant competitors at any stage decide not to jump further, the tie for first place shall stand. This rule shall not apply to the Combined Events.
  - i. Tying competitors must make a trial at every height until a decision is reached.
  - ii. Each competitor has one trial at each height.
  - iii. The jump-off shall start at the next height, determined in accordance with Rule 181.1, after the height last cleared by the tying competitors.
  - iv. If no decision is reached, the bar shall be lowered (if all have failed) or raised (if two or more have cleared) by 2cm in the High Jump and 5cm in the pole vault.
  - v. A competitor who does not jump at any height automatically forfeits any claim to the higher place. If only one other competitor remains, that competitor is declared the winner regardless of whether that height is attempted.



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**NOTE:** The following illustrates the application of subparagraph 9d, resolving a tie for first place in the High Jump or Pole Vault.

**Heights announced by the Chief Judge at the beginning of the competition: 1.75m, 1.80m, 1.83m, 1.86m, 1.88m, 1.90m,.....**

Competitor	Height and Performance (m)							Total Fails	Jump Off (m)			Final Place
	1.75	1.80	1.83	1.86	1.88	1.90	1.92		1.88	1.86	1.88	
A	0	X0	0	X0	--	XX-	X	2	X	0	X	2
B	X0	0	--	X0	--	--	XXX	2	X	0	0	1
C	X0	X0	X0	XXX	-	-	-	3	-	-	-	3

**(0)**=cleared **(X)**=failed – **(-)** -did not jump

All jumpers, A, B, and C, cleared 1.86m, and all three failed the next height that they attempted (C going out at 1.90, A and B at 1.92m). Since C had more total failures than A and B up to and including the height last cleared, C is awarded third place (see subparagraph 8(b)). Since A and B have the same number of failures, they must jump off to determine first place. The next height in the announced progression, after the tying height of 1.86m, is 1.88m. 1.88m, therefore, is the height at which the jump-off must start. The tie for first was broken in the jump-off when B cleared 1.88m, and A failed that height. B, therefore, was awarded first place and A second place.

(e) If it concerns any other place, the competitors shall be awarded the same place in the competition.

### High Jump And Pole Vault Apparatus

**10. Uprights (VJCR4)** Any style or kind of uprights or posts may be used provided they are rigid. In

the High Jump, the uprights should be sufficiently tall to exceed each height to which the bar is raised by at least 10cm. For the Pole Vault, cantilevered uprights shall be used. For the Pole Vault, it is required that the metallic structure of the base of the uprights be covered with padding of appropriate material in order to provide protection to an athlete who may land on it.

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**NOTE:** *The uprights and landing area of the High Jump should be positioned such that there is clearance of at least 10cm between them and the landing area when in use, to avoid accidental displacement of the crossbar by the movement of the landing area causing contact with the uprights.*

11. **Crossbar (VJCR5)**- The crossbar shall be of fiberglass or other suitable material, circular in cross-section. The diameter of the circular bar shall be at 3cm ( $\pm$  1mm). It shall be colored so as to be visible.

The crossbar shall consist of three parts: the circular bar and two end pieces, each 30-35mm wide and 15-20cm long, for the purpose of resting on the supports of the uprights. These end pieces shall be hard and smooth. They shall be circular or semicircular with one clearly defined flat surface on which the bar rests on the crossbar supports (see Figure 7). These flat surfaces may not be higher than the center of the vertical cross-section of the crossbar. The crossbar shall have no bias and, when in place, shall sag a maximum of 2cm for the high jump and 3cm for the pole vault.

**SUGGESTED CONTROL:** *Hang a 3kg weight in the middle of the crossbar when in position. It may sag a maximum of 7cm (High Jump) or 11cm (Pole Vault) with the end pieces and supports remaining in complete contact*

12. **Crossbar in the High Jump (VJCR6)**- The crossbar shall be not less than 3.98m or more than 4.02m in length. The distance between the uprights shall not be less than 4.00m or more than 4.04m. The maximum weight of the crossbar shall be 2.0kg.
13. **Crossbar in the Pole Vault (VJCR7)**- The crossbar shall not be less than 4.48m nor more than 4.52m in length. The maximum weight of the crossbar shall be 2.25kg.
14. **Indicator Lines -**

(a) **High Jump (VJCR8):** A white line 50mm wide shall be drawn on the ground (usually with adhesive tape or similar material). The edge of the line nearest to the take-off area is drawn along the vertical plane through the edge of the crossbar nearest to the take-off area, and extends for 3 meters on either side of the uprights.

(b) **Pole Vault (VJCR9):** A white line 1cm wide shall be drawn on the ground at right angles to the axis of the runway, in line with the back-end of the box ('zero' line). A similar line, up to 5cm wide, shall appear on the surface of the landing area and be prolonged as far as the outside edge of the uprights. The edge of the line nearer to the approaching competitor shall coincide with the back end of the box. This will facilitate the determination of the zero point and the checking of the uprights.

15. **Supports for Crossbar in the High Jump (VJCR10)** - The supports for the crossbar shall be flat and rectangular, 4cm wide and 6cm long. They shall be firmly fixed to the uprights and

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immovable during the jump, and shall each face the opposite upright. The ends of the crossbar shall rest on them in such a manner that if the crossbar is touched by a competitor, it will easily fall to the ground, either forwards or backwards. The surface of the supports shall be smooth. The supports shall be the same height above the takeoff area immediately below each end of the crossbar.

16. **End Space (VJCR11)** - There shall be a space of at least 1cm between the ends of the crossbar and the uprights for the high jump.
17. **Support for Crossbar in Pole Vault (VJCR12)** - The crossbar shall rest on pegs so that if it is touched by the competitor or the pole, it will fall easily to the ground in the direction of the landing area. The pegs shall be without notches or indentations of any kind, of uniform thickness throughout and not more than 13mm in diameter. They must not extend more than 55mm from the uprights, which should for Youth and Masters and shall for all others, extend 35-40mm above the pegs. The distance between the pegs shall not be less than 4.30m or more than 4.37m. The pegs may not be covered with rubber or with any other material that has the effect of increasing friction.

**NOTE:** *To facilitate the use of a landing area 6m wide (see paragraph 19, below), the pegs supporting the crossbar may be placed upon extension arms attached to the uprights thus allowing the uprights to be placed wider apart, without increasing the length of the crossbar.*

18. **Take-Off Box for Pole Vault (VJCR13)**- The box shall be constructed of a suitable material sunk level with the surface of the runway, preferably with rounded upper edges. It shall measure 1m in length measured along the inside of the bottom of the box, 60cm in width at the front end and tapering to 15cm in width at the bottom of the stop board. The length of the box at runway level and the depth of the stop board are determined by the angle of 105 degrees formed between the base and the stop board. The base of the box shall slope from runway level at the front end to a vertical distance below ground level of 20cm at the point where it meets the stop board. The box should be constructed in such a manner that the sides slope outward and end next to the stop board at an angle of approximately 120 degrees to the base. The box should be painted white. If the box is constructed of wood, the bottom shall be lined with 2.5mm sheet metal for a distance of 80cm from the front of the box. Diagrams showing the construction of the pole vault box appear in Figure 5.

**NOTE:** *For Youth Athletics provision, see Rule 302.5(k).*

19. **Landing Areas (VJCR14)**- Where it is feasible, the landing area for the High Jump should measure not less than 6m long (parallel to the crossbar) by 4m wide; for the Pole Vault it should measure not less than 6.15m long (perpendicular to the crossbar) by 6m wide. There shall be a minimum of 5 m of landing surface behind the box. The landing area for the High Jump and Pole Vault should be composed of soft material other than sawdust





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or shavings of such composition and construction to provide a soft landing. A front pad, similar in material and dimensions to the landing area, may be used to cover the area surrounding the take-off box of the Pole Vault and extending between the standards. In High Jump (**VJCR15**) the landing area should be a minimum height of .712m (28 in.); in the Pole Vault, it should be a minimum height of .813m (32 in.) above the take-off. The side of the landing area nearest to the box shall be placed 10-15cm from the box and shall slope away from the box at an angle of approximately 30 degrees. The exposed area to the sides and back of the vault box shall have suitable padding.

### Resources

#### RESOURCES – HIGH JUMP

- Event Preparations - High Jump, Feb 2018
- Five Alive – Verticals, Jan 2019
- Flight Coordinator Activities, Jan 2019
- Head Official Protocols - High Jump, Jan 2019
- High Jump - High School Rules, Jan 2019
- HJ Instructions & Rules - NCAA, Feb 2019
- Instructions to Athletes & Rules - High Jump - USATF, Feb 2018
- Resolving Ties – HJ & PV, Mar 2018
- Time Limits & Absence From Competition, Jan 2019
- Venue Diagram and Officials Assignments - HJ, Mar 2019
- Crossbar Preparations, Feb 2016 ([Video](#)) \*\* Very Good
- Evaluation Form - Vertical Jumps, Jan 2013
- Five Alive Webinar ([Link](#))
- High Jump Setup Presentation - 2011 Annual Meeting ([PPT](#))
- Vertical Events Recording Sheet – Landscape -Jan. 2018
- Vertical Events Recording Sheet – Portrait – Jan. 2018
- Vertical Jumps Monograph Series, Aug. 2012

All of the above RESOURCES are available at: [High Jump Resources](#)

#### Resources – POLE VAULT

- Five Alive – Verticals, Feb 18
- Flight Coordinator Activities, Aug 2018
- Head Official Protocol – PV, Jul 2017



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- Pole Vault Clinic Situations, Apr 2016
- Pole Vault Event Preparations, Sep 2018
- Pole Vault High School Instructions Preps & Instructions, Feb 2018
- Pole Vault Instructions & Rules – NCAA, Nov 2018
- Pole Vault Instructions & Rules – USATF, Mar 2018
- Pole Vault Officials Duties, Mar 2018
- Pole Vault Pit Boss Reference Card, Oct 2018
- Pole Vault Venue Assignments, Jun 2018
- Pole Vault Zeroing Standards, Jan 2017
- Resolving Ties – HJ & PV, Mar 2018
- Time Limits & Absence From Competition, Jan 2019
- Crossbar Preparations, Feb 2016
- Five Alive Webinar
- Laser Measuring, Jul 2013
- Metric Conversion Table, Feb 2016
- Pole Vault Head Officials Clinic Outline, Oct 2018
- Pole Vault High School Pole Inspections, Feb 2018
- Pole Vault High School Replacement Labels, Feb 2018
- Pole Vault Rules Comparison - Full, Mar 2018
- Rules Comparison - Pole Vault, April 2020
- Vertical Events Recording Sheet Landscape, Jan 2018
- Vertical Events Recording Sheet Portrait, Jan 2018
- Vertical Jumps Evaluation Form, Jan 2013
- Vertical Jumps Monograph Series, Aug 2012

All of the above RESOURCES are available at <https://www.flipsnack.com/USATF/pole-vault/full-view.html>

- USAFT Code of Ethics/ Professional Guidelines  
[USATF Code of Ethics and Performance Guidelines](#)



# Study Guide – 6 – Vertical Jumps Common Rules HJ/PV

## Module 6 – Vertical Jumps – Common Rules -Learning/Performance Objectives Mentor Checklist

Participant Name \_\_\_\_\_ Mentor Name \_\_\_\_\_

Learning/Performance Objective What should the JOP be able to explain or do?	PO #	Date Completed	Mentor Initials
USATF Rule 181;	VJCR1		
USATF Rule 143.3	VJCR2		
Placing High jump and Pole Vault	VJCR3		
Uprights	VJCR4		
Crossbar	VJCR5		
Crossbar in the High Jump	VJCR6		
Crossbar in the Pole Vault	VJCR7		
Indicator Line - High Jump	VJCR8		
Indicator Line – Pole Vault	VJCR9		
Supports for the Crossbar in High Jump	VJCR10		
Crossbar in the High Jump	VJCR11		
Crossbar in the Pole Vault	VJCR12		
Indicator Line - High Jump	VJCR13		
Indicator Line – Pole Vault	VJCR14		
Supports for the Crossbar in High Jump	VJCR15		

The Learning/Performance Objectives for Module 5 are contained in the Mentor Assessments Field of Play Evaluations for Study Guide 7 – High Jump and in Study Guide 8 – Pole Vault.