# Fundamentals of Hitting

V3.0 February 2018



# Agenda

- Bat Selection
- Grip and Stance
- Load
- Stride
- Swing
- Finish
- Mental Aspect of Hitting
- Bunting
- Before the At Bat

## But First a Reminder: Safety First!

- Train players to carefully look around before swinging bats
- Bats should never be raised and swung unless the player is in the ondeck circle or in the batter box, or doing a designated drill in a designated area
- Players should always wear helmets when hitting, even off a tee
- Catchers should always wear catching gear, including catcher's mask, when catching behind a batter. This includes coaches who are catching!
- Coaches and umps who are calling balls/strikes behind plate should also wear a mask

# Bat Selection

#### Bats

- The league supplies a set of bats for each team that the coach lugs around in the equipment bag
- Coach should pick different sized bats (see next slides on sizes) to address needs of full range of players on the team
- But we also recommend that if a player wants to practice at home OR wants a personal bat that is better suited for themselves, that parents the should buy their own bats or use a hand me down bat
- At the Spring / rec level an expensive bat is not needed ... no need to spend big \$\$
- Proper bat size is important see next few slides but quick pro-tips:
  - Weight: If a player cannot hold the bat outstretched with more than one hand for more than 10 seconds, it is too heavy!
  - Length: knob of bat should go to the players wrist when bat is stood upright on floor and players arm are hanging lose on their sides
- Bats must be marked "ASA Softball approved" with a 2004 date or newer, i.e. if a used bat should be less than a decade old

## Bat Size and Types

Our sister league MVLA has a good write up on bat sizes and types (source: <a href="http://www.mvlags.org/page/show/1018831-equipment-requirements-for-all-divisions">http://www.mvlags.org/page/show/1018831-equipment-requirements-for-all-divisions</a>), see below. Feel free to share this link with parents looking to buy a bat

Players should use 'Aluminum' and 'alloy' bats that cost \$50 or less (\$20-\$30 is fine). If you are considering buying a bat that costs more than \$50, make sure the bat isn't labeled composite, titanium or double-walled. For safety reasons, MVLAGS does not allow the composite, titanium or double-walled bats.

Choose a light bat with at least a 9 oz drop marked "official softball ASA Approved" (2-1/4-inch diameter or less) and a 2004-or-later certification.

"Drop" refers to the difference between the bat length in inches and its weight in ounces.

Popular bat sizes are:

- 25" long / 16 oz. (-9 drop) for 6U
- 26" long / 17 oz. (-9 drop) for 8U
- 28" long / 19 oz. (-9 drop) for 10U
- 30" long / 20 oz. (-10 drop) for 12U
- 32" long / 22 oz. (-10 drop) for 14U

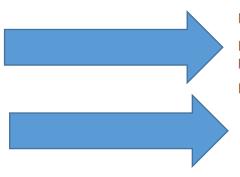
Note: The Batter's Box website has a bat sizing chart for youth by player height and weight.

Bat Length -- As a rule of thumb, the knob of the bat should come to the player's wrist when the bat is stood upright on the floor and player's arms are hanging loosely at her sides.

Bat Weight -- The player should be able to hold the bat with one arm outstretched for 10 seconds.

- Drops higher than 10 are becoming increasingly available at affordable prices, and it is generally better to err on the side of getting a bat that is too light than one that is too heavy.
- Buying a bat that a player can grow into is a common mistake because she may perform poorly while the bat is too heavy and as a result, won't have fun.

Note that certain bats, though ASA-certified, are prohibited for play in MVLAGS intraleague games (played in Division 12U and above). Composite, titanium, or multi-walled bats are not allowed.



## Bat Length ...

• This is a good table you can reference for bat length, but we find that this is more geared for smaller girls, so we would suggest adding 1" to each recommendation below for slightly bigger

girls

Height Weight	3'-3'4"	3'5"-3'8"	3'9"-4'	4'1"-4'4"	4'5"-4'8"	4'9"-5'	5'1"-5'4"	5'5"-5'8"	5'9"-6'	6'1"-over
< 60	26"	27"	28"	29"	29"					
61-70	27"	27"	28"	29"	30"	30"				
71-80		28"	28"	29"	30"	30"	31"			
81-90		28"	29"	29"	30"	30"	31"	32"		
91-100		28"	29"	30"	30"	31"	31"	32"		
101-110		29"	29"	30"	30"	31"	31"	32"		
111-120		29"	29"	30"	30"	31"	31"	32"		
121-130		29"	30"	30"	30"	31"	32"	33"	33"	
131-140		29"	30"	30"	31"	31"	32"	33"	33"	
141-150			30"	30"	31"	31"	32"	33"	33"	
151-160			30"	31"	31"	32"	32"	33"	33"	33"
161-180				31"	31"	32"	32"	33"	33"	34"
181-190						32"	33"	33"	34"	34"
190 +							33"	33"	34"	34"

#### Bat Length by Age Guide

AGE	5-7	8-9	10	11-12	13-14	15-16
LENGTH	24"-26"	26"-28"	28"-29"	30"-31"	31"-32"	32"-33"

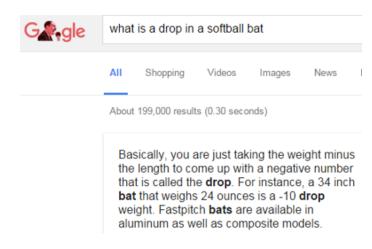
## Bat Length Matters, But So Does Weight

Prior slide has the appropriate length. Next determine weight. If a player cannot hold the bat outstretched with more than one hand for more than 10 seconds, it is too heavy! Err on too light vs. too heavy. Pick something that they can swing comfortably

Length minus weight = drop. So lower drop is probably better for most beginner girls (see "Drop" definition below). Below are popular bat lengths and sizes for small to mid-size girls in their age group (bigger/stronger girls should go bigger)

- 25" long / 16 oz. (-9 drop) for 6U
- 26" long / 17 oz. (-9 drop) for 8U
- 28" long / 19 oz. (-9 drop) for 10U
- 30" long / 20 oz. (-10 drop) for 12U
- 32" long / 22 oz. (-10 drop) for 14U

Again caution parents that mileage may vary (so don't invest too much in a bat) ... for rec league it is totally ok to buy a \$20-30 bat or reuse someone else's bat (as long as it not too old)



If parent or player is not certain about bat size, then you should recommend before they buy a bat that the player should try 3 or 4 of the team bats to find the right size before they purchase

# Grip and Stance

## Grip

- If player is righty, right hand on top of bat
- If lefty, left hand on top
- Line up door knocking knuckles
- Grip with pads of hands, not deep in palm
- Don't squeeze the bat too tight the hitter should apply pressure with the fingers and not the palms





Source: <a href="https://www.youtube.com/watch?v=e4C2kLbkzZg">https://www.youtube.com/watch?v=e4C2kLbkzZg</a>

#### Stance

- Get into athletic position
- Athletic position is the equivalent of the landing position if someone were to jump forward, with feet outside hips and knees inside feet and slight knee bend and slight bend at waist
- Body weight is on the inside of the legs and the balls of the feet
- Toes, hips and shoulders should be facing plate





#### Distance from Plate

Player should check if they can touch outside of plate with their bat ...
use lead arm to check (i.e. just one arm, not holding bat with both
hands)

- If not, nudge closer to the plate
- Toes should be equal distance to the plate

Picture Source: <a href="https://www.youtube.com/watch?v=pUa2OEo8HSI">https://www.youtube.com/watch?v=pUa2OEo8HSI</a>



#### Bat Placement

- Once you are in athletic position, lower the bat so it is resting on shoulder
- In effect form letter A as shown in pix, with elbows down
- Keep bat on shoulder while pitcher gets ready and hitter is awaiting pitch ... only raise bat up when the pitcher begins pitching motion (otherwise player can get tired holding bat up)
- Raise bat near ear and maintain A
  - Myth is telling the players to keep the back elbow up → should be in A
- Bat should be at 45 degree angle
- Don't wrap bat around head or raise back elbow







#### Focus

- Make sure hitter can get a good 2 eye view of the pitcher
- Initially focus eyes on the pitcher's chest or shoulders with a soft focus, and then when pitcher begins pitching motion, shift focus with a hard focus to where pitcher releases the ball (near pitcher's hip aka release point)

# Load

## Load aka Negative Movement or Trigger

- Like in golf or tennis, to swing forward, you must first by going backwards with your swing
- As pitcher begins motion, begin to transfer weight back
  - Probably about 60% of weight is on back and 40% is on front
  - Weight comes off front foot (i.e. slight heel lift) and is now more focused on inside of back leg
- Keep hands in strong position
  - Don't twist bat back



#### Starting athletic position

Now loaded



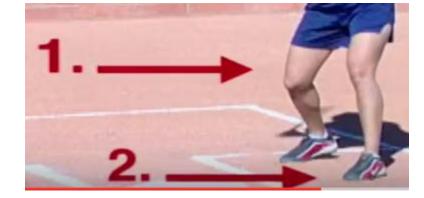


https://www.youtube.com/watch?v=pUa2OEo8HSI (9:06 to 9:33)

# Stride

#### Stride aka Positive Movement

- Represents the shifting of weight forward and toe touching of forward foot, and serves as a timing mechanism for the swing
- i.e. #1 is negative with weight shifting to back, and then to #2 where weight now shifts forward
- Note this does not represent a big step forward of the front foot, it is a shifting of weight
  - Could be a toe tap on the front foot or just shifting of weight or a very short step (at most 2-4 inches)



Load position



Now the toe tap (or short step) as weight shifts forward



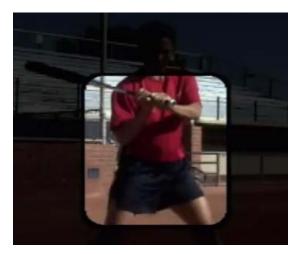
https://www.youtube.com/watch?v=IfklEpsFF8w (:40 to :50)

# Swing

## Swing

- The swing is the rotational phase of hitting
- Hip rotations should begin during swing
  - Myth of telling players to "Squish the bug" with back foot is not recommended as it (a) throws hips off too much and (b) does not allow the back foot to transfer the weight to the front foot
- Swinging motion is in effect throwing hands to the ball while leading with the elbow that in effect has the knob of the bat inside the path of the ball
- Keep hands close to the body as you lead with elbow aka "keep hands tight" to the body
- Goal is to have a short compact swing get to the ball quickly!!
  - In effect the movement resembles a karate chop with the lower hand





#### Contact

- As you lead with the elbow with bat handle facing pitcher, you bring the bat around and make contact
- Key is hip rotation



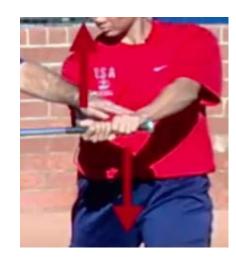




#### Palms at Contact Point

Top hand should be facing up, bottom hand facing down





## Hitting Slow Pitches

- When facing a slow pitcher, the speed of the swing must remain the same
- It is how long the hitter waits that determines success

Source: Softball Skills & Drills by Judi Garman

# Finish

# Going from Contact to Extension to Follow Through (aka Finish)

- Batter goes from contact to extension with the bat
- Weight will transfer almost completely to the front leg but remains on the balls of the feet
- Try to imagine keeping bat on ball as long as possible
- Extension is in effect pointing the bat head at the pitcher
- Don't roll wrists until after extension
  - After extension the top hand takes over and you then roll the wrists and follow through
  - Myth is that you roll the wrists at contact; reality is you should only happen after contact and extension
- Hands should follow high and behind head



Palms in proper position as pitch comes in and contact about to be made

#### Wrists roll after extension



note how far ball is off bat after wrist roll

# Mental Aspects of Hitting

## Yes Yes Yes/No

- Good hitters are aggressive and are prepared to hit every pitch
- Batters should stride to every pitch with the intention of hitting the ball
- The adjustment to hold up on the swing should be made at the last moment
- Approach to a pitch is "yes yes yes no" or "yes yes yes"
- If the batter does not prepare to swing at every pitch, she will not be able to pull the trigger when she really wants to swing

Source: Softball Skills & Drills (Garmin), page 18

# Bunting

#### Stance

- There are 2 common stances to bunting:
  - Squared stance feet are parallel to the front line of the box; feet are shoulder width apart; in effect fully facing the pitcher
  - Pivot stance batter pivots on the balls of both feet and turn the belly button towards the pitcher; feet are as if in hitting position but the back foot is a couple of inches closer to the plate

square





pivot

Source: <a href="https://www.youtube.com/watch?v=qarxkyVGY64">https://www.youtube.com/watch?v=qarxkyVGY64</a>

#### Which Stance?

- Square stance is easier for beginners as it easier to get timing correct and be stationary at contact. Negative is that it is more difficult to get out of the way of a wild pitch
- Pivot stance gives hitters a better running position and gives better outside plate coverage, and is easier to get out of the way of wild pitches
- Either stance is fine (i.e. no correct stance), depends on players and coaches preference

Source: Softball Skills & Drills (Garmin)

#### Feet Location

- Irrespective of which stance, the batter should be up in the batters box, nearer the front line of the batters box, so that any bunt directly down is in fair territory and will not bounce off the plate
- Keep feet in the batter's box that would be an out if you hit ball with a foot out of the batter's box



#### Hand Placement

- Top hand moves up to where the barrel starts to get wider (i.e. just above the tape)
  - Top hand should grip the bat as if shaking hands, with thumb on top
  - To the extent possible hide the fingers behind the bat when hitting the ball, vs. wrapping the fingers around the bat where they can be hit by the ball
- Bottom hand for younger players should slide up halfway up the grip for better bat control (i.e. shortens the bat)
  - Important: Many youth coaches forget to tell young players to slide up the bottom hand and just focus on top hand





## Bat Angle

- You can have two angles
  - Level held horizontally at top of strike zone. Advantage is you just have to move the bat down with your legs, and can more easily judge the strike zone (if above the bat, it is a ball). Disadvantage is that a foul ball may lead to a pop up to the catcher. Beginners may find it easier to do level.
  - Angled at a 45 degree angle, and the bat head can be pointed slightly to the pitcher. A foul ball will tend to kick to the side.

Angeled











#### Contact

- A bunter does not hit the ball in the classic sense of swinging, but instead "catches" the ball with the bat
- To bunt a lower pitch, the batter bends at the knees while maintaining the same bat angle
  - In effect the batter uses her legs as an elevator and gets their butt down
  - But do not move bat angle bat angle always stays the same

Note how bat angle stays the same for a lower pitch, i.e. use lower body and not use barrel of bat





## Too Many Choices for Bunting?

- Coaches should pick what they feel the most comfortable teaching
- For beginners, a square stance with level bat angle may be easiest to teach

# Before the At Bat

#### Misc.

- Batters in the on deck circle should time their load/stride/swing to the pitcher pitching to the batter before them so they get (vs. randomly swinging the bat)
  - This also encourages the on-deck hitter to see the ball in play so as not to get hit by a foul ball or interfere with a play in foul territory
- Batters should be encouraged to develop a routine when up to the plate (e.g. taking a deep breath, settling into the box, etc.)