4X100m Relay
The goal of the exchange is to move the baton around the track as fast as possible. The exchange should not slow up the speed the baton is traveling around the track. This is often caused by the incoming runner, running up on the outgoing runner or outgoing runner taking off to soon and then having to slow up.

Basic set up – inside, outside, etc.
- 1st leg – inside of lane, baton in right hand
- 2nd leg – outside of lane, baton in left hand
- 3rd leg – inside of lane, right hand
- 4th leg – outside of lane, left hand

<table>
<thead>
<tr>
<th>Relay Leg</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand</td>
<td>Right</td>
<td>Left</td>
<td>Right</td>
<td>Left</td>
</tr>
<tr>
<td>Lane position</td>
<td>Inside</td>
<td>Outside</td>
<td>Inside</td>
<td>Outside</td>
</tr>
</tbody>
</table>

Setting up steps
- Start at the end of the acceleration zone triangle and count off 15 heel to toe steps backwards on the track then put a tape mark down.
- Begin at the acceleration zone, toes pointing forward, knees bent, prepared to explode out of stance.
- Incoming runner lines up at the top of the curve and sprints as fast as they can
- Outgoing runner starts when incoming runner hits the tape. When incoming runner hits the tape it’s like the start of the 100m dash for the outgoing runner
- Don’t slow up to make the handoff
- Both runners should run as fast as they can, the steps are what should be adjusted, not the speed of the athletes while trying to establish steps
- Adjust steps as needed based off of what happened with the exchange.
- Once steps are established and we are in the middle of the season we will then try to make handoffs happen even if the steps are messed up but not the first few days.

Push pass hand off style
- Outgoing runner has high flat palm, lead with elbow, hand can be out to the side if needed
- Incoming runner says stick when they close the distance, wait’s to see the hand of the incoming runner, then pushes baton into hand, holding baton straight up.

Responsibilities
- Incoming runner responsibilities
  - Stay on your side of the lane
  - Keep an eye on the beginning of the exchange zone
  - Say stick loud once the outgoing runner is within reach
  - Wait to see hand then carefully aim and push the baton into the outgoing runners hand.
  - Be prepared to run up on the outgoing runner but don’t slam on the brakes.
  - Be prepared to yell again if the outgoing runner is getting away from you.
- Outgoing runners responsibilities
  - Stay on your side of the lane
  - Focus on the tape mark and when the incoming runner reaches that point
  - Take off as fast as possible once the incoming runner hits the tape
Keep an eye on where you are at in the exchange zone
Once the incoming runner says stick, place hand high, flat, steady, and open. Make a big easy target for the incoming runner
Be prepared to slow down slightly if you reach the middle of the exchange zone
Be prepared to slow up a little more if you run a few strides past the middle of the exchange zone
Be prepared to turn and take a 4X4 handoff if you get close to the end of the exchange zone.

Potential problems / Trouble shooting
- Punch, not push
- Don’t aim, just slap it in
- Hand to low, in the wrong position.
- Incoming runner slowing up because they ran up onto outgoing runner.
- Outgoing runner slowing up to much because they feel like they should have received the baton by now.
- Runner taking off too early to try and compensate for a teammate being behind
- Running at different speeds in practice and in meets.
- We will practice bad handoffs.

4X100m relay order
- If everyone is the same speed
  - 1st leg - best starter/best out of blocks
  - 2nd leg – consistent with handoffs
  - 3rd leg – great curve runner and great handoffs
  - 4th leg – most competitive, performs under pressure, doesn’t break form while under pressure
- Factors in deciding order
  - 4th leg – fastest kid on team?, most competitive kid that can run well under pressure
  - 2nd leg - second fastest kid, doesn’t handle pressure well, takes a while to get up to top speed (200/400m runner), great at handoffs
  - 1st leg – best out of blocks, worst taking handoffs?, second fastest
  - 3rd leg – fastest curve runner, great with handoffs, 2nd fastest athlete??, best curve runner from a standing start, bad out of blocks.
- The hunter and the hunted

Trying to manipulate where the baton is received (reasons and problems)
- The theory is that the 2nd leg runner should be the fastest runner because you could have them run the furthest by having them receive the baton very early in the zone and pass it very late in the zone essentially running 120 meters.
- Potential problems
  - One of your athletes will be decelerating 10-20 meters longer than the team with all runners running close to 100m.
  - It can be risky to push the ends of the zones.
  - The third leg could also be stretched out to 120 meters
  - The first and fourth leg could be 110 meters
  - The second and third leg could be 80 meters so does that mean the slowest leg runs second?
Splits for 4X1
- We film the race or I don’t bother.
- Get video editing software that has a timer and step by step capabilities
- Include starters gun in the beginning of the video
- Zoom in on each exchange zone so you can see the middle of the exchange zone
- 1st split is first sign of smoke to middle of 300 hurdle start
- 2nd split is 300 hurdle start to 200m dash start
- 3rd split is 200m dash start to 100m dash start
- 4th split is 100m dash start to finish line
- It doesn’t matter which runner is carrying the baton at the middle of the exchange zone
- Don’t compare splits of different legs to one another
  - If all athletes are the same speed then 1st split is always going to be the slowest with 2nd or 4th being the fastest.

Practice progression in the early weeks through mid-season
- We practice handoffs twice a week on speed days
- Try not to let it interrupt to many other aspects of speed workout

<table>
<thead>
<tr>
<th>4x1 handoffs progression 1</th>
<th>4x1 handoffs progression 2</th>
<th>4x1 handoffs progression 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual receiving form</td>
<td>Individual receiving form</td>
<td>Individual receiving form</td>
</tr>
<tr>
<td>2 person handoffs</td>
<td>4 person handoffs</td>
<td>2 person handoffs</td>
</tr>
<tr>
<td>4 person handoffs</td>
<td>Jogging handoffs 400m</td>
<td>4 X 50m strides</td>
</tr>
<tr>
<td>Walking handoffs 100m</td>
<td>Fast tempo handoffs 400m</td>
<td>Establish steps @ 1st exchange zone (begin with 15 steps)</td>
</tr>
<tr>
<td>Jogging handoffs 300m</td>
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<td></td>
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</tbody>
</table>

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<thead>
<tr>
<th>4x1 handoffs progression 4</th>
<th>4x1 handoffs progression 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 X 50m strides</td>
<td>Practice handoffs x amount of times</td>
</tr>
<tr>
<td>Establish steps @ 1st exchange zone (begin with 15 steps)</td>
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Mid-season practice
- First and third handoff at first exchange zone then 2nd handoff at second exchange zone
- Incoming and outgoing runner pick a lane for the entire practice session
- Coach stands in the middle of the exchange zone and yells out which lane is going to go.
- Athletes sprint through the end of the exchange zone
- Try to make the handoff happen no matter what goes wrong
- Coach gives immediate feedback to the athletes after handoff then calls next lane to go
- 2-3 good handoffs
- Factor amount of meters ran into the total meters for the day.

**4X400m Relay**
The main goal is to make sure the baton does not slow down as it’s being exchanged.
- Outgoing runner needs to get out good
- Incoming runner needs to expect to run into the zone and not handoff immediately
- Baton should be passed close to the middle of the exchange zone
- It’s unacceptable for the incoming runner to slow down before they have handed the baton off.
- The outgoing runner must get out and make the incoming runner continue to run to them

Visual exchange / V up
- Outgoing runner responsibilities
  - Stand in an athletic stance
  - Judge when to take off based on incoming runners speed
- Turn and take two to three hard strides with proper running form
  - Don't shuffle, or look back during this time.
- Turn upper body towards the inside of the track while trying note to interrupt stride.
- Put arm out straight with relaxed wide open hand
- Grab top half of baton from incoming runner
- After outgoing runner receives baton switch hands

- Incoming runners responsibilities
  - Find teammate amongst other teams
  - Expect to continue running hard into the zone up until the baton is passed
  - Once the outgoing runner takes off, hold baton straight up and down/vertical to the track
  - Outgoing runner should take the baton at that point

Why turn inside instead of outside
- All the action is happening inside of the track
- If it's crowded during the handoff the athletes running the fastest are in the inside lanes
- If teams are spaced out, the athlete receiving the baton turns towards empty space as opposed to other teams on the backside.

4X4 splits
- Splits should be taken from the middle of the exchange zone
- First exchange split is usually taken from the one turn stagger starting line which is usually the start of the 800m run
- The other three splits are taken from the finish line
- It doesn't matter who has the baton. It is taken when the runner with the baton crosses the finish line.

4X400m relay order considerations