### TESTING PROTOCOLS

Mike Butler November 2018

- Sport Canada mandate: testing and data collection is an essential piece of an NSO, it is a requirement for many sources of funding
- Why is this good for our athletes?
- Who is being tested?
- What is being measured?
- Who administers the testing?
- How often is this done?



- Why is this good for our athletes?
  - Establishes baseline and tracks athletes and groups over time
  - Valuable tool in gap analysis
  - Gives feedback to coaches and athletes to aid in developing programs in their daily training environment to close these gaps

#### Who is being tested?

- Senior National Team
- Junior National Team
- Provincial players with support from PSOs



- What is being measured?
- Our vision is to obtain measurements via the five pillars of Podium Pathway
  - 1. Physical
  - 2. Technical
  - 3. Tactical
  - 4. Mental
  - 5. Life Skills



#### What is currently being measured?

- Physical/Fitness testing
  - Developed in 2014 by Elizabeth Gnatiuk, an exercise physiologist
  - Other tests, developed by Canadian Sport Institute
- Technical testing
  - Most recently developed in 2017 by Badminton Canada



#### Who administers the testing?

- National Coaches
- Canadian Sport Institute
- Provincial Coaches
- Club Coaches

#### How often does testing occur?

- Currently 1 2 times per year, for the national teams
- Depends on schedules of our athletes



#### BADMINTON CANADA TESTING

Fitness tests

- Technical tests
  - Accuracy measures
  - Technical measures



## Fitness

- Vertical Jump
- Long Jump
- Push Ups
- Planks
- Agility
- Beep Test



- Movement to Shuttle
- Prep & Start of Hit
- Contact & Timing
- Recovery



# ccuracy

- Full Smash
- Lifts
- Clears
- Drops

Physical characteristics: height, weight

 Musculoskeletal fitness: flexibility, power, core strength (sit & reach, vertical jump, horizontal jump, medicine ball throw, plank, push ups)

Anaerobic fitness (4 corner, agility)

Aerobic fitness (Beep Test)

### FITNESS TESTING PROTOCOL

Updated/modified in 2014 by Applied Exercise Physiologist Elizabeth Gnatiuk



Technical

Smash

Lifts

Drops

Clears

Movement to shuttle (10 pts)

 Preparation & Start of Hit (10 pts)

Contact & Timing (10 points)

Recovery (10 points)

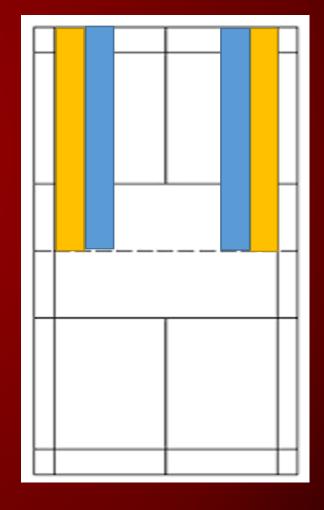
#### TECHNICAL TEST



Accuracy
Smash Lifts Drops Clears

- Gold 2 pts, Blue 1 pt
- Protocol: Player starts in the middle, and is fed 20 shuttles from side to side at the baseline. Enough time is given for the player to fully recover to the centre before the next shuttle is fed. For each shuttle, player must hit a straight "full-smash" (no lighter than 80% of their max). Feeds should be of a normal "lift" height (not as high as a classic high singles serve).

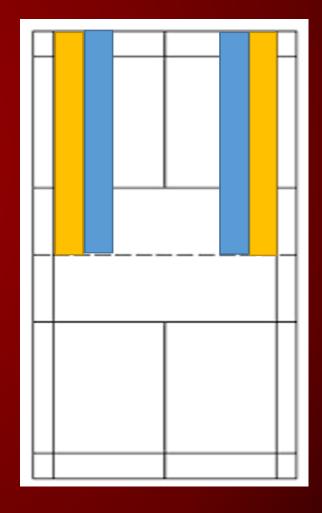
## ACCURACY OF SMASH



#### Count:

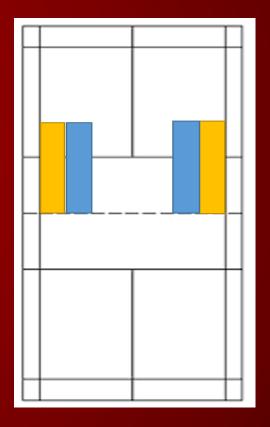
- In, within 30 cm of singles sideline 2 points for each shuttle in this zone (Gold)
- In, but between 30 cm and 60 cm 0f singles sideline 1 point for each shuttle in this zone (Blue)
- Number of shuttles outside either zone

## ACCURACY OF SMASH



Protocol: Player starts in the middle, and is fed 20 shuttles from side to side at the baseline. Enough time is given for the player to fully recover to the centre before the next shuttle is fed. For each shuttle, player must hit a straight drop shot, either clean or with some slice. Coaches are looking for good use of angles and control. Feeds should be of a normal "lift" height (not as high as a classic high singles serve).

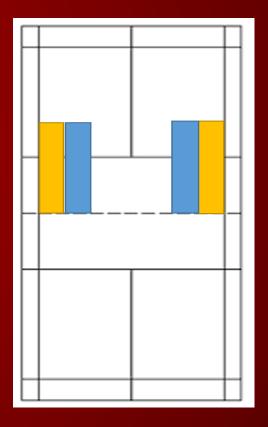
## ACCURACY OF DROPSHOT



#### Count:

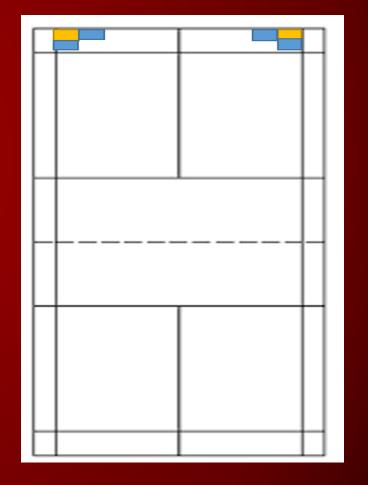
- How many shuttles within 30 cm of singles sideline and no more than 50 cm beyond the short singles service line – 2 points for each shuttle in this zone
- How many shuttles in, but between 30 & 60 cm of singles sideline and no more than 50 cm beyond the short singles service line 1 point for each shuttle in this zone
- Number of shots outside of either zone

## ACCURACY OF DROPSHOT



Protocol: NEW Shuttles must be used. Player starts slightly forward of centre base, and is fed 20 shuttles from side to side at the net. Feeder stands in centre of short service line, and throws shuttle UNDERHAND from side to side, creating a high arc so that the shuttle passes over the net by 30cm, and past the net by 30cm (shuttle should land halfway between net and short-service line; laterally it should land 1 metre within singles side line). Player, using whatever footwork they choose, moves quickly to the shuttle, and using an underhand technique, lifts the shuttle to the baseline, aiming for within 30 cm of the baseline and 50cm in from the singles side-line.

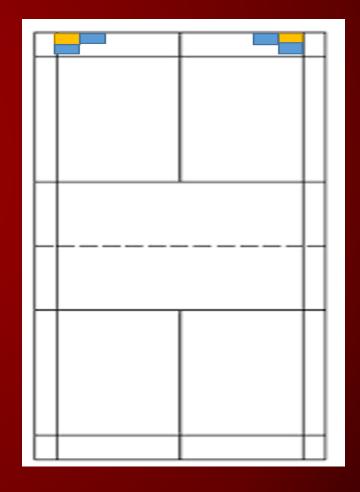
## ACCURACY OF LIFT: FOREHAND & BACKHAND



#### **Count:**

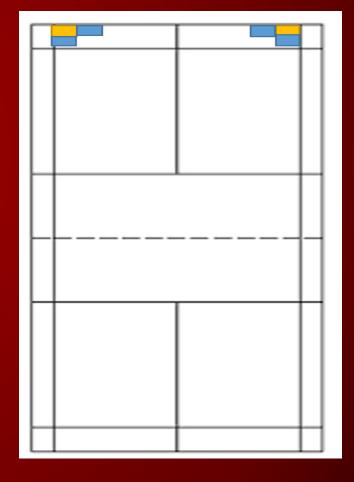
- How many shuttles within 30 cm of baseline and within 50 cm of singles sideline – 2 points each
- How many shuttles in, 50-80cm from side &< 30 from back or <50 from side & 30-60 from back - 1 point for each shuttle in this zone
- Number of shots outside of either zone

## ACCURACY OF LIFT: FOREHAND & BACKHAND



Protocol: Player starts in the middle, and is fed 20 shuttles from side to side at the baseline. Enough time is given for the player to fully recover to the centre before the next shuttle is fed. For each shuttle, player must hit a straight clear. Feeds should be of a normal "lift" height (not as high as a classic high singles serve).

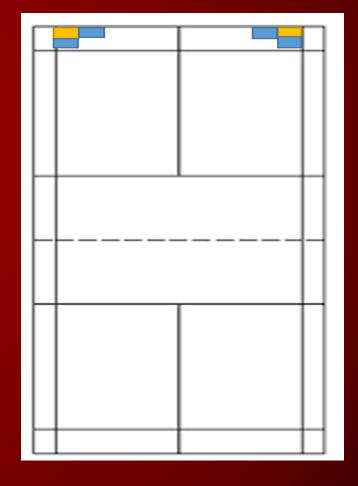
## ACCURACY OF CLEARS



#### **Count:**

- How many shuttles within 30 cm of baseline and within 50 cm of singles sideline – 2 points each
- How many shuttles in, 50-80cm from side &< 30 from back or <50 from side & 30-60 from back - 1 point for each shuttle in this zone
- Number of shots outside of either zone

## ACCURACY OF CLEARS



- Establish standards for each group whether it be national teams, PTSOs, clubs
- Records measurements
- Track growth in a variety of areas
- Aid in gap analysis
- Our testing protocols continue to evolve

#### **OBJECTIVES**

