

Velocity-Based Postoperative Interval Throwing Program for Pitchers

This interval throwing program is designed to provide a **safe, structured, and progressive return to overhand throwing for pitchers** following shoulder or elbow surgery. The goal is to restore throwing mechanics, arm endurance, and confidence while minimizing the risk of reinjury.

This program reflects the principles used in our sports medicine practice to guide athletes back to competition through a **criteria-based, symptom-guided progression**. Athletes should advance only when each phase is completed **completely pain-free**, with no increase in soreness, stiffness, or loss of motion the following day.

Throwing Progression

- Progression is **individualized**—there is no mandatory timeline.
- Advancement occurs only when the current step is completed **without pain or abnormal fatigue**.
- It is OK to go through this program slower than what is planned if your arm needs additional time to recover. However, regardless of how you feel, **you cannot progress through the program faster than planned**. Trying to advance too quickly will likely ultimately delay your recovery and return to play.
- Do not make more than 20 throws in one zone without taking a 10-minute break

Throwing Mechanics

- Proper throwing mechanics are key to preventing reinjury and maximizing performance. If possible, throw under the supervision of a qualified coach, instructor, physical therapist, or athletic trainer. Now is the time to perfect mechanics.
- Step into throws or use a crow hop to maximize lower body mechanics to generate velocity

Weightlifting / Strength Training

- Rest is an integral part of the throwing program. At the beginning of the program, this will not seem important, but as the program progresses, it will become increasingly taxing and strenuous
- Non-throwing days are meant for recovery for the throwing arm
- Do not perform shoulder/elbow focused rehabilitation or strengthening exercises on non-throwing days; these should be done on throwing days after the throwing program has been completed
- Use off-days to train core and lower body

Workload / Program Design

- This program was designed to maintain a safe **acute to chronic workload ratio (ACWR)** throughout the entirety of the throwing program.
- ACWR compares short-term load (7-day rolling average) to long-term conditioned load (28-day rolling average)
- Previous research has established that ACWR values between 0.70 and 1.30 represent the ideal training zone, with values above 1.30 associated with increased injury risk and values below 0.70 indicate detraining.
- This program never exceeds ACWR of 1.30 and averages ACWR of 1.15

Why Velocity-Based (Not Distance-Based)?

- The purpose of an interval throwing program is to safely re-introduce the elbow, shoulder, and entire kinetic chain to the demands of high velocity throwing. Doing so requires a gradual increase in the stress placed on the throwing arm, which is directly correlated with throwing intensity.
- Traditional return-to-throw programs use distance as a proxy for intensity. However, research has shown this relationship is inconsistent - an athlete can throw at high intent from 60 feet or lob the ball from 120 feet with minimal stress. In addition, throwing space is often limited for athletes completing their interval throwing program in the off-season in colder climates.
- Without needing advanced and expensive technology, velocity is the best, most reliable and objective measure of arm stress. A velocity-based approach allows us to precisely control tissue loading, monitor fatigue in real-time, and ensure progression is driven by measurable data.
- The velocity zones are calibrated to the pitcher's pre-injury max velocity

	Maximum Pre-Injury Velocity (MPH)															
	100	98	96	94	92	90	88	86	84	82	80	78	76	74	72	70
Zone 1	46-50	45-49	44-48	43-47	42-46	41-45	40-44	39-43	38-42	37-41	36-40	35-39	34-38	33-37	32-36	31-35
Zone 2	52-56	51-55	50-54	49-53	48-52	46-50	45-49	44-48	43-47	42-46	41-45	40-44	39-43	37-41	36-40	35-39
Zone 3	57-61	56-60	55-59	53-57	52-56	51-55	50-54	48-52	47-51	46-50	45-49	44-48	42-46	41-45	40-44	39-43
Zone 4	63-67	62-66	60-64	59-63	58-62	56-60	55-59	54-58	52-56	51-55	50-54	48-52	47-51	46-50	44-48	43-47
Zone 5	68-72	67-71	65-69	64-68	62-66	61-65	59-63	58-62	56-60	55-59	54-58	52-56	51-55	49-53	48-52	46-50
Zone 6	74-78	72-76	71-75	69-73	68-72	66-70	65-69	63-67	62-66	60-64	58-62	57-61	55-59	54-58	52-56	51-55
Zone 7	79-83	77-81	76-80	74-78	72-76	71-75	69-73	67-71	66-70	64-68	62-66	61-65	59-63	57-61	56-60	54-58
Zone 8	85-89	83-87	81-85	80-84	78-82	76-80	74-78	73-77	71-75	69-73	67-71	65-69	64-68	62-66	60-64	58-62
Zone 9	90-94	88-92	86-90	84-88	82-86	81-85	79-83	77-81	75-79	73-77	71-75	69-73	67-71	66-70	64-68	62-66
Zone 10	96-100	94-98	92-96	90-94	88-92	86-90	84-88	82-86	80-84	78-82	76-80	74-78	72-76	70-74	68-72	66-70

Structured Warm-Up Routine – To be performed prior to everything throwing session. No exceptions.

General Warm-Up

- Begin each session with light aerobic activity (jogging, cycling, jump rope, etc.) to increase blood flow and tissue temperature. Once a light sweat is achieved, proceed to stretching.

Stretching

- Full-body stretching is emphasized to optimize mobility and reduce injury risk. Efficient pitching requires coordinated motion from the legs, core, and upper extremity—not the arm alone.
- Wrist flexion and extension stretches with the elbow fully extended – 2 x 20 seconds in each direction
- Shoulder cross body adduction stretch – 2 x 20 seconds
- Sleeper stretch – 2 x 20 seconds

Throwing Arm Activation

- Band pull-apart – 2 x 15 reps
- Banded A-T-Y raises – 1 x 8 reps in each position
- Standing scapula slides – 2 x 10 reps
- Banded internal and external rotation – 2 x 12 reps in each direction

Standard Post-Throw / Arm Care Routine

- NISMAT Arm Care 2 x 10 reps each exercise (can be exchanged with Advanced Throwers Ten if athlete/therapist/prefers)
- Baseball bat forearm pronation in 90° of elbow flexion 2 x 10 reps
- Baseball bat ulnar deviation 2 x 10 reps
- Wrist roller 10 down and ups with elbows fully extended
- Dead hangs (elbows, shoulders, back, and core engaged) – 30 second hang x 2 (increase length of hang as able)
- Wind sprints 60 feet x 10
- Full body stretching
- Wrist flexion and extension stretches with the elbow fully extended – 2 x 20 seconds in each direction
- Shoulder cross body adduction stretch – 2 x 20 seconds
- Sleeper stretch – 2 x 20 seconds

Week 1	Type	Warm-Up	Throwing Protocol	Cool-Down
Day 1	Catch play	Standard	Zone 2: 5 throws Zone 3: 20 throws Zone 4: 30 throws	Standard
Day 2	Off / Recovery	-	-	Standard without NISMAT
Day 3	Catch play	Standard	Zone 2: 20 throws	Standard
Day 4	Off / Recovery	-	-	Standard without NISMAT
Day 5	Catch play	Standard	Zone 2: 5 throws Zone 3: 20 throws Zone 4: 30 throws	Standard
Day 6	Off / Recovery	-	-	-
Day 7	Off / Recovery	-	-	-

Week 2	Type	Warm-Up	Throwing Protocol	Cool-Down
Day 8	Catch play	Standard	Zone 3: 5 throws Zone 4: 20 throws Zone 5: 10 throws	Standard
Day 9	Off / Recovery	-	-	Standard without NISMAT
Day 10	Catch play	Standard	Zone 3: 30 throws	Standard
Day 11	Off / Recovery	-	-	Standard without NISMAT
Day 12	Catch play	Standard	Zone 3: 5 throws Zone 4: 20 throws Zone 5: 20 throws	Standard
Day 13	Off / Recovery	-	-	-
Day 14	Off / Recovery	-	-	-

Week 3	Type	Warm-Up	Throwing Protocol	Cool-Down
Day 15	Catch play	Standard	Zone 3: 5 throws Zone 4: 15 throws Zone 5: 25 throws	Standard
Day 16	Off / Recovery	-	-	Standard without NISMAT
Day 17	Catch play	Standard	Zone 3: 15 throws Zone 4: 10 throws	Standard
Day 18	Off / Recovery	-	-	Standard without NISMAT
Day 19	Catch play	Standard	Zone 3: 5 throws Zone 4: 15 throws Zone 5: 25 throws	Standard
Day 20	Catch play	Standard	Zone 3: 25 throws	Standard
Day 21	Off / Recovery	-	-	-

Week 4	Type	Warm-Up	Throwing Protocol	Cool-Down
Day 22	Catch play	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 30 throws	Standard
Day 23	Off / Recovery	-	-	Standard without NISMAT
Day 24	Catch play	Standard	Zone 3: 30 throws	Standard
Day 25	Off / Recovery	-	-	Standard without NISMAT
Day 26	Catch play	Standard	Zone 3: 5 throws Zone 4: 15 throws Zone 5: 30 throws	Standard
Day 27	Catch play	Standard	Zone 3: 30 throws	Standard
Day 28	Off / Recovery	-	-	-

Week 5	Type	Warm-Up	Throwing Protocol	Cool-Down
Day 29	Catch play	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 20 throws Zone 6: 10 throws	Standard
Day 30	Off / Recovery	-	-	Standard without NISMAT
Day 31	Catch play	Standard	Zone 3: 20 throws Zone 4: 15 throws	Standard
Day 32	Off / Recovery	-	-	Standard without NISMAT
Day 33	Catch play	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 20 throws Zone 6: 15 throws	Standard
Day 34	Catch play	Standard	Zone 3: 20 throws Zone 4: 10 throws	Standard
Day 35	Off / Recovery	-	-	-

Week 6	Type	Warm-Up	Throwing Protocol	Cool-Down
Day 36	Catch play	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 20 throws Zone 6: 15 throws	Standard
Day 37	Off / Recovery	-	-	Standard without NISMAT
Day 38	Catch play	Standard	Zone 3: 20 throws Zone 4: 20 throws	Standard
Day 39	Off / Recovery	-	-	Standard without NISMAT
Day 40	Catch play	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 15 throws Zone 6: 20 throws	Standard
Day 41	Catch play	Standard	Zone 3: 25 throws Zone 4: 15 throws	Standard
Day 42	Off / Recovery	-	-	-

Week 7	Type	Warm-Up	Throwing Protocol	Cool-Down
Day 43	Catch play	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 20 throws Zone 6: 22 throws	Standard
Day 44	Off / Recovery	-	-	Standard without NISMAT
Day 45	Catch play	Standard	Zone 3: 20 throws Zone 4: 25 throws	Standard
Day 46	Off / Recovery	-	-	Standard without NISMAT
Day 47	Catch play	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 15 throws Zone 6: 25 throws	Standard
Day 48	Catch play	Standard	Zone 3: 20 throws Zone 4: 10 throws	Standard
Day 49	Off / Recovery	-	-	-

Week 8	Type	Warm-Up	Throwing Protocol	Cool-Down
Day 50	Catch play	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 20 throws Zone 6: 25 throws	Standard
Day 51	Off / Recovery	-	-	Standard without NISMAT
Day 52	Catch play	Standard	Zone 3: 20 throws Zone 4: 20 throws	Standard
Day 53	Off / Recovery	-	-	Standard without NISMAT
Day 54	Catch play	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 12 throws Zone 6: 35 throws	Standard
Day 55	Catch play	Standard	Zone 3: 20 throws Zone 4: 20 throws	Standard
Day 56	Off / Recovery	-	-	-

Week 9	Type	Warm-Up	Throwing Protocol	Cool-Down
Day 57	Catch play	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 20 throws Zone 6: 35 throws	Standard
Day 58	Off / Recovery	-	-	Standard without NISMAT
Day 59	Catch play	Standard	Zone 3: 10 throws Zone 4: 30 throws	Standard
Day 60	Off / Recovery	-	-	Standard without NISMAT
Day 61	Catch play	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 40 throws	Standard
Day 62	Catch play	Standard	Zone 3: 20 throws Zone 4: 20 throws	Standard
Day 63	Off / Recovery	-	-	-

Week 10	Type	Warm-Up	Throwing Protocol	Cool-Down
Day 64	Catch play	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 25 throws Zone 7: 12 throws	Standard
Day 65	Off / Recovery	-	-	Standard without NISMAT
Day 66	Catch play	Standard	Zone 3: 10 throws Zone 4: 30 throws Zone 5: 5 throws	Standard
Day 67	Off / Recovery	-	-	Standard without NISMAT
Day 68	Catch play	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 15 throws Zone 6: 20 throws Zone 7: 20 throws	Standard
Day 69	Catch play	Standard	Zone 3: 20 throws Zone 4: 30 throws	Standard
Day 70	Off / Recovery	-	-	-

Week 11	Type	Warm-Up / Arm Care	Throwing Protocol	Cool-Down
Day 71	Catch play	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 15 throws Zone 6: 15 throws Zone 7: 25 throws	Standard
Day 72	Off / Recovery	-	-	Standard without NISMAT
Day 73	Catch play	Standard	Zone 3: 20 throws Zone 4: 30 throws	Standard
Day 74	Off / Recovery	-	-	Standard without NISMAT
Day 75	Catch play	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 15 throws Zone 7: 35 throws	Standard
Day 76	Catch play	Standard	Zone 3: 10 throws Zone 4: 30 throws	Standard
Day 77	Off / Recovery	-	-	-

Week 12	Type	Warm-Up	Throwing Protocol	Cool-Down
Day 78	Catch play	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 15 throws Zone 6: 10 throws Zone 7: 35 throws	Standard
Day 79	Off / Recovery	-	-	Standard without NISMAT
Day 80	Catch play	Standard	Zone 3: 20 throws Zone 4: 10 throws Zone 5: 15 throws	Standard
Day 81	Off / Recovery	-	-	Standard without NISMAT
Day 82	Catch play	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 45 throws	Standard
Day 83	Catch play	Standard	Zone 3: 10 throws Zone 4: 30 throws Zone 5: 5 throws	Standard
Day 84	Off / Recovery	-	-	-

Week 13	Type	Warm-Up	Throwing Protocol	Cool-Down
Day 85	Catch play / Zone 8+ throws from mound / all 4 seam fastball grip	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 20 throws Zone 8: 20 throws	Standard
Day 86	Off / Recovery	-	-	Standard without NISMAT
Day 87	Catch play	Standard	Zone 3: 10 throws Zone 4: 20 throws Zone 5: 25 throws	Standard
Day 88	Off / Recovery	-	-	Standard without NISMAT
Day 89	Catch play / Zone 8+ throws from mound / all 4 seam fastball grip	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 12 throws Zone 8: 25 throws	Standard
Day 90	Catch play	Standard	Zone 3: 10 throws Zone 4: 20 throws Zone 5: 15 throws	Standard
Day 91	Off / Recovery	-	-	-

Throwing in zone 8 from the mound with proper mechanics should feel nearly effortless.

Week 14	Type	Warm-Up	Throwing Protocol	Cool-Down
Day 92	Catch play / Zone 8+ throws from mound / all 4-seam fastball grip	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 15 throws Zone 8: 25 throws	Standard
Day 93	Off / Recovery	-		Standard without NISMAT
Day 94	Catch play	Standard	Zone 3: 10 throws Zone 4: 25 throws Zone 5: 25 throws	Standard
Day 95	Off / Recovery	-	-	Standard without NISMAT
Day 96	Catch play / Zone 8+ throws from mound / all 4-seam fastball grip	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 15 throws Zone 8: 35 throws	Standard
Day 97	Catch play	Standard	Zone 3: 5 throws Zone 4: 20 throws Zone 5: 20 throws	Standard
Day 98	Off / Recovery	-	-	-

Day	Type	Warm-Up	Throwing Protocol	Cool-Down
Day 99	Catch play / Zone 8+ throws from mound / 4-seam and 2-seam fastball grip*	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 15 throws Zone 8: 35 throws	Standard
Day 100	Catch play	Standard	Zone 3: 20 throws	Standard
Day 101	Catch play	Standard	Zone 3: 10 throws Zone 4: 20 throws Zone 5: 20 throws	Standard
Day 102	Off / Recovery	-	-	Standard without NISMAT
Day 103	Catch play / Zone 8+ throws from mound / 4-seam and 2-seam fastball grip	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 15 throws Zone 8: 40 throws	Standard
Day 104	Catch play	Standard	Zone 3: 5 throws Zone 4: 20 throws Zone 5: 20 throws	Standard
Day 105	Off / Recovery	-	-	-

*If you do not throw a 2-seam fastball, use 4-seam grip only; no cut fastballs yet

Week 16	Type	Warm-Up	Throwing Protocol	Cool-Down
Day 106	Catch play / Zone 8+ throws from mound / 4-seam, 2-seam, and changeups	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 15 throws Zone 8: 40 throws	Standard
Day 107	Catch play	Standard	Zone 3: 25 throws	Standard
Day 108	Catch play	Standard	Zone 3: 10 throws Zone 4: 15 throws Zone 5: 30 throws	Standard
Day 109	Off / Recovery	-	-	Standard without NISMAT
Day 110	Catch play / Zone 8+ throws from mound / 4-seam, 2-seam, and changeups	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 15 throws Zone 8: 50 throws	Standard
Day 111	Catch play	Standard	Zone 3: 5 throws Zone 4: 20 throws Zone 5: 20 throws	Standard
Day 112	Off / Recovery	-	-	-

Week 17	Type	Warm-Up	Throwing Protocol	Cool-Down
Day 113	Catch play / Zone 8+ throws from mound / 4-seam, 2-seam, and changeups	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 15 throws Zone 8: 50 throws	Standard
Day 114	Catch play	Standard	Zone 3: 30 throws	Standard
Day 115	Catch play	Standard	Zone 3: 10 throws Zone 4: 20 throws Zone 5: 30 throws	Standard
Day 116	Off / Recovery	-	-	Standard without NISMAT
Day 117	Catch play / Zone 8+ throws from mound / 4-seam, 2-seam, and changeups	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 15 throws Zone 8: 55 throws	Standard
Day 118	Catch play	Standard	Zone 3: 5 throws Zone 4: 20 throws Zone 5: 20 throws	Standard
Day 119	Off / Recovery	-	-	-

Week 18	Type	Warm-Up	Throwing Protocol	Cool-Down
Day 120	Catch play / Zone 8+ throws from mound / 4-seam, 2-seam, and changeups	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 15 throws Zone 8: 20 throws Zone 9: 20 throws	Standard
Day 121	Catch play	Standard	Zone 3: 25 throws Zone 4: 15 throws	Standard
Day 122	Catch play	Standard	Zone 3: 10 throws Zone 4: 30 throws Zone 5: 30 throws	Standard
Day 123	Off / Recovery	-	-	Standard without NISMAT
Day 124	Catch play / Zone 8+ throws from mound / 4-seam, 2-seam, and changeups	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 15 throws Zone 8: 20 throws Zone 9: 30 throws	Standard
Day 125	Catch play	Standard	Zone 3: 5 throws Zone 4: 15 throws Zone 5: 30 throws	Standard
Day 126	Off / Recovery	-	-	-

Week 19	Type	Warm-Up	Throwing Protocol	Cool-Down
Day 127	Catch play / Zone 8+ throws from mound / 4-seam, 2-seam, and changeups / mix in breaking balls for zone 9 throws only	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 15 throws Zone 8: 10 throws Zone 9: 35 throws	Standard
Day 128	Catch play	Standard	Zone 3: 25 throws Zone 4: 10 throws	Standard
Day 129	Catch play	Standard	Zone 3: 10 throws Zone 4: 30 throws Zone 5: 30 throws	Standard
Day 130	Off / Recovery	-	-	Standard without NISMAT
Day 131	Catch play / Zone 8+ throws from mound / 4-seam, 2-seam, and changeups / mix in breaking balls for zone 9 throws only	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 15 throws Zone 8: 10 throws Zone 9: 45 throws	Standard
Day 132	Catch play	Standard	Zone 3: 5 throws Zone 4: 15 throws Zone 5: 30 throws	Standard
Day 133	Off / Recovery	-	-	-

Week 20	Type	Warm-Up	Throwing Protocol	Cool-Down
Day 134	Catch play / Zone 8+ throws from mound / 4-seam, 2-seam, and changeups / mix in breaking balls for zone 9 throws only	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 15 throws Zone 8: 10 throws Zone 9: 45 throws	Standard
Day 135	Catch play	Standard	Zone 3: 25 throws Zone 4: 10 throws	Standard
Day 136	Catch play	Standard	Zone 3: 10 throws Zone 4: 30 throws Zone 5: 30 throws	Standard
Day 137	Off / Recovery	-	-	Standard without NISMAT
Day 138	Catch play / Zone 8+ throws from mound / 4-seam, 2-seam, and changeups / mix in breaking balls for zone 9 throws only	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 15 throws Zone 8: 15 throws Zone 9: 50 throws	Standard
Day 139	Catch play	Standard	Zone 3: 5 throws Zone 4: 15 throws Zone 5: 30 throws	Standard
Day 140	Off / Recovery	-	-	-

Week 21	Type	Warm-Up	Throwing Protocol	Cool-Down
Day 141	Catch play / Zone 8+ throws from mound / 4-seam, 2-seam, and changeups / mix in breaking balls for zone 9 throws only	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 15 throws Zone 8: 15 throws Zone 9: 50 throws	Standard
Day 142	Catch play	Standard	Zone 3: 25 throws Zone 4: 10 throws	Standard
Day 143	Catch play	Standard	Zone 3: 10 throws Zone 4: 30 throws Zone 5: 30 throws	Standard
Day 144	Off / Recovery	-	-	Standard without NISMAT
Day 145	Catch play / Zone 8+ throws from mound / 4-seam, 2-seam, and changeups / mix in breaking balls for zone 9 throws only	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 15 throws Zone 8: 20 throws Zone 9: 55 throws	Standard
Day 146	Catch play	Standard	Zone 3: 5 throws Zone 4: 15 throws Zone 5: 30 throws	Standard
Day 147	Off / Recovery	-	-	-

Week 22	Type	Warm-Up	Throwing Protocol	Cool-Down
Day 148	Catch play / Zone 8+ throws from mound / 4-seam, 2-seam, and changeups / mix in breaking balls for zone 9 throws only / zone 10 fastballs only	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 15 throws Zone 8: 10 throws Zone 9: 50 throws Zone 10: 5 throws	Standard
Day 149	Catch play	Standard	Zone 3: 25 throws Zone 4: 10 throws	Standard
Day 150	Catch play	Standard	Zone 3: 10 throws Zone 4: 30 throws Zone 5: 30 throws	Standard
Day 151	Off / Recovery	-	-	Standard without NISMAT
Day 152	Catch play / Zone 8+ throws from mound / 4-seam, 2-seam, and changeups / mix in breaking balls for zone 9 throws only / zone 10 fastballs only	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 15 throws Zone 8: 10 throws Zone 9: 45 throws Zone 10: 15 throws	Standard
Day 153	Catch play	Standard	Zone 3: 5 throws Zone 4: 15 throws Zone 5: 30 throws	Standard
Day 154	Off / Recovery	-	-	-

Week 23	Type	Warm-Up	Throwing Protocol	Cool-Down
Day 155	Catch play / Zone 8+ throws from mound / 4-seam, 2-seam, and changeups / mix in breaking balls for zone 9 throws only / zone 10 fastballs only with hitter in box but no swinging	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 15 throws Zone 8: 10 throws Zone 9: 45 throws Zone 10: 15 throws	Standard
Day 156	Catch play	Standard	Zone 3: 25 throws Zone 4: 10 throws	Standard
Day 157	Catch play	Standard	Zone 3: 10 throws Zone 4: 30 throws Zone 5: 30 throws	Standard
Day 158	Off / Recovery	-	-	Standard without NISMAT
Day 159	Catch play / Zone 8+ throws from mound / 4-seam, 2-seam, and changeups / mix in breaking balls for zone 9 throws only / zone 10 fastballs only with hitter in box but no swinging	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 15 throws Zone 8: 10 throws Zone 9: 40 throws Zone 10: 25 throws	Standard
Day 160	Catch play	Standard	Zone 3: 5 throws Zone 4: 15 throws Zone 5: 30 throws	Standard
Day 161	Off / Recovery	-	-	-

Week 24	Type	Warm-Up	Throwing Protocol	Cool-Down
Day 162	Catch play / Zone 8+ throws from mound / 4-seam, 2-seam, and changeups / mix in breaking balls for zone 9 throws only / zone 10 fastballs + changeups only	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 15 throws Zone 8: 15 throws Zone 9: 25 throws Zone 10: 25 throws	Standard
Day 163	Catch play	Standard	Zone 3: 20 throws Zone 4: 20 throws	Standard
Day 164	Catch play	Standard	Zone 3: 10 throws Zone 4: 20 throws Zone 5: 45 throws	Standard
Day 165	Off / Recovery	-	-	Standard without NISMAT
Day 166	Catch play / Zone 8+ throws from mound / 4-seam, 2-seam, and changeups / mix in breaking balls for zone 9 throws only / live hitters for zone 10 fastballs + changeups only	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 15 throws Zone 8: 10 throws Zone 9: 30 throws Zone 10: 40 throws	Standard
Day 167	Catch play	Standard	Zone 3: 5 throws Zone 4: 15 throws Zone 5: 30 throws	Standard
Day 168	Off / Recovery	-	-	-

Week 25	Type	Warm-Up	Throwing Protocol	Cool-Down
Day 169	Catch play / Zone 8+ throws from mound / 4-seam, 2-seam, and changeups / mix in breaking balls for zone 9 throws only / zone 10 fastballs + changeups only	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 15 throws Zone 8: 15 throws Zone 9: 20 throws Zone 10: 40 throws	Standard
Day 170	Catch play	Standard	Zone 3: 20 throws Zone 4: 20 throws	Standard
Day 171	Catch play	Standard	Zone 3: 10 throws Zone 4: 20 throws Zone 5: 45 throws	Standard
Day 172	Off / Recovery	-	-	Standard without NISMAT
Day 173	Catch play / Zone 8+ throws from mound / 4-seam, 2-seam, and changeups / mix in breaking balls for zone 9 throws only / live hitters for zone 10 fastballs + changeups only	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 15 throws Zone 8: 10 throws Zone 9: 15 throws Zone 10: 50 throws	Standard
Day 174	Catch play	Standard	Zone 3: 5 throws Zone 4: 15 throws Zone 5: 30 throws	Standard
Day 175	Off / Recovery	-	-	-

Week 26	Type	Warm-Up	Throwing Protocol	Cool-Down
Day 176	Catch play / Zone 8+ throws from mound / zone 9 and 10 – full pitch repertoire	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 10 throws Zone 8: 10 throws Zone 9: 25 throws Zone 10: 50 throws	Standard
Day 177	Catch play	Standard	Zone 3: 20 throws Zone 4: 20 throws	Standard
Day 178	Catch play	Standard	Zone 3: 10 throws Zone 4: 20 throws Zone 5: 45 throws	Standard
Day 179	Off / Recovery	-	-	Standard without NISMAT
Day 180	Catch play / Zone 8+ throws from mound / zone 9 and 10 – full pitch repertoire ; live hitters for zone 10 only	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 10 throws Zone 8: 10 throws Zone 9: 10 throws Zone 10: 65 throws	Standard
Day 181	Catch play	Standard	Zone 3: 5 throws Zone 4: 15 throws Zone 5: 30 throws	Standard
Day 182	Off / Recovery	-	-	-

Week 27	Type	Warm-Up	Throwing Protocol	Cool-Down
Day 183	Catch play / Zone 8+ throws from mound / zone 9 and 10 – full pitch repertoire	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 10 throws Zone 8: 10 throws Zone 9: 15 throws Zone 10: 45 throws	Standard
Day 184	Catch play	Standard	Zone 3: 20 throws Zone 4: 20 throws	Standard
Day 185	Catch play	Standard	Zone 3: 10 throws Zone 4: 20 throws Zone 5: 45 throws	Standard
Day 186	Off / Recovery	-	-	Standard without NISMAT
Day 187	Live Game #1 – see below for zone 10 throwing breakdown	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 10 throws Zone 8: 10 throws Zone 9: 15 throws Zone 10: 85 throws	Standard
Day 188	Catch play	Standard	Zone 3: 5 throws Zone 4: 15 throws Zone 5: 30 throws	Standard
Day 189	Off / Recovery	-	-	-
Live game throwing breakdown: <ul style="list-style-type: none"> • Long toss: 25 throws • Pre-game bullpen: 25 pitches • Warm up: 8 pitches • 1st inning: 20 pitches 				

Week 28	Type	Warm-Up	Throwing Protocol	Cool-Down
Day 190	Catch play / Zone 8+ throws from mound / zone 9 and 10 – full pitch repertoire	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 10 throws Zone 8: 10 throws Zone 9: 15 throws Zone 10: 45 throws	Standard
Day 191	Catch play	Standard	Zone 3: 20 throws Zone 4: 20 throws	Standard
Day 192	Catch play	Standard	Zone 3: 10 throws Zone 4: 20 throws Zone 5: 45 throws	Standard
Day 193	Off / Recovery	-	-	Standard without NISMAT
Day 194	Live Game #2 – see below for zone 10 throwing breakdown	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 10 throws Zone 8: 10 throws Zone 9: 15 throws Zone 10: 105 throws	Standard
Day 195	Catch play	Standard	Zone 3: 5 throws Zone 4: 15 throws Zone 5: 30 throws	Standard
Day 196	Off / Recovery	-	-	-
Live game throwing breakdown: <ul style="list-style-type: none"> • Long toss: 25 throws • Pre-game bullpen: 25 pitches • Warm up: 8 pitches • 1st inning: 20 pitches • Warm up: 8 pitches • 2nd inning: 20 pitches 				

Week 29	Type	Warm-Up	Throwing Protocol	Cool-Down
Day 197	Catch play / Zone 8+ throws from mound / zone 9 and 10 – full pitch repertoire	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 10 throws Zone 8: 10 throws Zone 9: 15 throws Zone 10: 45 throws	Standard
Day 198	Catch play	Standard	Zone 3: 20 throws Zone 4: 25 throws	Standard
Day 199	Catch play	Standard	Zone 3: 10 throws Zone 4: 20 throws Zone 5: 35 throws	Standard
Day 200	Off / Recovery	-	-	Standard without NISMAT
Day 201	Live Game #3 – see below for zone 10 throwing breakdown	Standard	Zone 3: 5 throws Zone 4: 10 throws Zone 5: 10 throws Zone 6: 10 throws Zone 7: 10 throws Zone 8: 10 throws Zone 9: 10 throws Zone 10: 120 throws	Standard
Day 202	Catch play	Standard	Zone 3: 5 throws Zone 4: 15 throws Zone 5: 30 throws	Standard
Day 203	Off / Recovery	-	-	-
Live game throwing breakdown: <ul style="list-style-type: none"> • Long toss: 25 throws • Pre-game bullpen: 25 pitches • Warm up: 8 pitches • 1st inning: 20 pitches • Warm up: 8 pitches • 2nd inning: 20 pitches • Warm up: 8 pitches • 3rd inning: 20 pitches 				