DPS Physical Fitness Testing and Assessment Model
# Program Evolution

<table>
<thead>
<tr>
<th>Year</th>
<th>Legislation Description</th>
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<tbody>
<tr>
<td>2005</td>
<td>Appropriations Act Rider</td>
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<tr>
<td></td>
<td>- Created legislative mandate for physical fitness &amp; appearance standards</td>
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<td></td>
<td>- Fitness Intervention Technologies (Fit Force)</td>
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<td>- Multitude of fitness tests &amp; Job Task Simulation</td>
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<tr>
<td>2007</td>
<td>TX Government Code, Chapter 614</td>
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<tr>
<td></td>
<td>- Created legislative mandate for physical fitness programs &amp; physical fitness standards for state law enforcement agencies</td>
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<tr>
<td></td>
<td>- Continued previous fitness tests &amp; Job Task Simulation</td>
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<tr>
<td>2007</td>
<td>TX Government Code 664.061</td>
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<tr>
<td></td>
<td>- Legislation encouraging all state agencies, not only law enforcement, to create wellness programs and provide support</td>
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Program Evolution

2009
Reduced Fitness Tests to 3 Exercises & Age/Gender Requirements from Legislature

- Based on collected data, attempt to reduce injury potential & based on foundation of tests from Fitness Intervention Technologies
- Legislature amended Texas Government Code Chapter 614 requiring age/gender
- FLETC & Cooper Institute 25th percentile threshold utilized

2010
Began Rower Study & Recruit Training Involvement

- Dr. Fritz Hagermann, Concept 2, The Cooper Institute, FLETC Physical Fitness Instructor Coordinator Program, Department of Defense
- Rower initiated to investigate ways to decrease subjectivity, improve efficiency, increase employee options, reduce injury potential and provide tests of functionality
- Collection of data by testing all commissioned officers in the agency to establish fitness threshold of current commissioned personnel
- Increased nutritional education for recruits & adjusted periodization of recruit training
Program Evolution

2011
Rower Implementation & 25% Age/Gender Threshold

- Implemented rower to increase test efficiency, decrease potential for subjectivity, decrease injury potential & provide additional options to benefit employees

Dr. Fritz Hagermann, Concept 2, The Cooper Institute, University of Texas Mathematician, Department of Defense


2012
Fitness Wellness Unit Staffing

- Hiring of additional staff to create unit
- Provide workouts, presentations, and field questions to officers throughout the state
- Assist with changes to physical fitness program in recruit training and provide increased nutritional education to recruits
Program Evolution

DPS Fitness Institute established to create Subject Matter Experts in the field

- Added SME’s in the field and resources for officers within their region throughout the state
- Training & Credentialing of internal employees from The Cooper Institute prior to transitioning to The American College of Sports Medicine
- Fitness Improvement Plan Resource available from FWU Staff & Institute Graduates
2013

Passing Threshold Adjusted to 50th percentile

- Following acclimation period and upon increased agency support/resources, fitness of agency showed improvement
- While at 25th percentile requirement, 98% of all age/gender cohorts were passing at 50th percentile threshold with no disparate impact
- The 25th percentile was a threshold correlating with descriptor of poor fitness by American College of Sports Medicine, The Cooper Institute

2013

Added Test Option of Combat Fitness Test

- Increased test options for employees by adding Combat Fitness Evaluation based off of Fight Gone Bad Assessment
Program Evolution

2017

Added Test Options of 500m & 4 Minute Row Tests

- Department of Defense, Concept 2
- Implemented O’Neill 4 Minute Test & Initiated 500m Row Test Study to provide additional options to benefit employees and increase means to address inherent physiological differences of individuals while still testing functional abilities relating to the job and eliciting the same physiological taxation response and burden from each test option

2017

Passing Threshold Adjusted to 70th percentile

- Adjustment by PSC after increase in agency resources, adjustment to recruit training and improvement of fitness within agency
- At 50th percentile requirement, 90% of all age/gender cohorts were passing at 70th percentile threshold with no disparate impact
- 50th percentile – a threshold correlating with descriptor of Fair fitness by American College of Sports Medicine, The Cooper Institute – thus bringing TX DPS to a level described as Good, a descriptor of the 70th percentile
• Evolution of fitness and wellness program due to 21st Century Recommendations for Policing and focus on Officer Safety, De-escalation Directives, Prevalence of Statistics on Adverse Issues within Commissioned Officers

• FBI Studies, IACP, Department of Defense, CALEA

• Thresholds within 3-tiers accepted by credentialing authorities: NIBHL; CDC; Mayo Clinic; ACSM; NIH; DOD; NASM

• PSC approved CP Requirements effective 9/1/19
Trainings, Consults, Research (2005-present):

- Fitness Intervention Technologies (Fit Force)
- Dr. Fritz Hagermann
- Concept 2
- The Cooper Institute & The Cooper Institute Law Enforcement Advisory Board
- University of Texas Mathematician
- McArdle Publications
- Federal Law Enforcement Training Training Center (FLETC)
- Department of Defense
- National Institute of Blood Heart and Lungs (NIBHL)
- Centers for Disease Control (CDC)
- U.S. Olympic Training Center
- American College of Sports Medicine Conference
- National Academy of Sports Medicine
- National Strength and Conditioning Association – TSAC
Program Effective 9/1/19

Physical Fitness Test Options Include:
- 2,000m Row
- 4 Minute Row
- 500m Row
- Combat Fitness
- Standard PFT

If completing Fitness Testing and Command Presence Measurements on the same day, Command Presence Measurements should always precede Fitness Components.
Highlighted Supporting Research


Program Evaluation

• Mid-year and the End-of-Year Reports are completed after each testing cycle

• Reviewed by Executive leadership; Legal
DPS FWU ETR Recognized SMEs

- **Alexis Schminke, Training Specialist**
  - Bachelor of Science Colorado State University
  - Certified Holistic Nutritionist, Certified Nutrition and Wellness Consultant, Functional Diagnostic Nutrition Practitioner, National Academy of Sports Medicine (NASM) - Certified Personal Trainer and Corrective Exercise Specialist, Cooper Certified Law Enforcement Fitness Specialist, USA Weightlifting Sports Performance Coach, Trigger Point therapy Instructor
DPS FWU ETR Recognized SMEs

- **Michael Harper, FWU Program Supervisor**

- Masters of Education in Health & Physical Education and Bachelor degrees from Tarleton State University and Howard Payne University. *(Statistical Dissemination and Research)*

- Cooper Institute Certified Personal Trainer, United States Weightlifting Sports Performance Coach, Cooper Institute Law Enforcement Fitness Specialist Instructor, Functional Movement Screen Level I & II Instructor

- Served as the Associate Director and Strategy Leader for First Responder and Military Programs for The Cooper Institute and created The Cooper Institute's Law Enforcement Advisory Board to analyze field needs and ensure education assisted with a physical "state of readiness" within law enforcement.

- Curriculum development, editing process and delivery of content on Health/Fitness/Wellness/Stress Management topics

- Recognized as a SME, Mike has delivered presentations at regional, state, national, and international conferences as well as regular dissemination through scholarly publications, including peer reviewed research articles, and online content.
DPS FWU ETR Recognized SMEs

• **Greg Davis, Captain**

  • Master of Science; Bachelor of Arts; Bachelor of Science Degrees from the University of Texas at Austin and Texas State University. *(Research and Statistical Dissemination Development)*

  • Cooper Certified Law Enforcement Fitness Specialist, United States Weightlifting Sports Performance Coach, Law Enforcement Fitness Training Coordinator – Federal Law Enforcement Training Center, and Functional Movement Specialist.

  • As a Law Enforcement Fitness Specialist and a Law Enforcement Physical Fitness Training Coordinator, Captain Davis has 20 years of educational/practical expertise as well as teaching expertise in the following disciplines: Biomechanics in Resistance Training; Injury Management; Fitness and Wellness; Anatomy; Exercise Physiology; Flexibility; Exercise Safety; Cardiovascular Prescription; Behavior Change; Strength Training and Prescription; Anatomy Joint Action; Goal Setting; Tabata Sprint Methodology; Power-lifting; Cross Training; Body Computation Analysis; Nutrition; Hydration; Program Design; Boot Camp Mechanics; Circuit Leadership; Sand-bell Instructor; Concept 2 Rower Instructor; Advanced TCOLE Instructor; and Master Level Peace Officer.

  • Served on the Cooper Institute of Aerobic Research National Law Enforcement Advisory Board dealing with fitness trends and issues affecting law enforcement "State of Readiness", health and wellness.

  • Under his direction, the Fitness Wellness Unit established the DPS Physical Fitness Institute and the DPS Informational Symposium on Physical Readiness Testing and Assessment.

  • Recognized as a Health/Fitness/Wellness SME, Capt. Davis has delivered requested presentations to the International Association of Chiefs of Police; State Police & Provincial Academy Directors Assc; CODE-4; Minnesota Chiefs of Police Association Executive Training Institute; Georgia Police Accreditation Coalition; Texas Police Chiefs Association; Law Enforcement Management Institute of Texas (LEMIT); Texas Department of Criminal Justice; Texas Alcoholic Beverage Commission; Office of the Attorney General; Texas Parks & Wildlife; Texas Association of Counties; Capitol Area Law Enforcement Executives Association; Texas Municipal Human Resources Association Conference; and the Ontario Provincial Police – Canada – Executive Council.
Resources

• Credentials SME’s in FWU
• 65 DPS Fitness Institute Graduates in the Field as lead resources
• Over 800 DPS personnel trained to be supplemental resources in the field as Concept 2 Row Testers

• Website informational resources
  • Daily Workouts, Weekly Wellness Tips, Monthly Webinars
  • Nutrition Resources, Technique Tips, Resilience Training

• Current research (sleep; nutrition; wellness; resiliency; fitness)

• Proactive Fitness & Nutrition Improvement Plans
Program Recognition and SME Request

- Law Enforcement Management Institute of Texas (LEMIT)
  - Sam Houston State University – Police Chief and Command Staff Leadership Training Series (six year investment 2013-present)

- International Association of Chiefs of Police
  - State Police & Provincial Academy Directors
    - Annual Presentation requests
  - State & Provincial Police
    - Mid-year and Annual Presentations

- FBI-Law Enforcement Executive Development Association (FBI-LEEDA)
  - Wellness/Resiliency SHIELD Training for the Leadership Institute (Supervisor/Command/Executive)
Program Recognition and SME Request

- Minnesota Chiefs of Police Association
  - Executive Training Institute

- Ontario Provincial Police – Canada
  - Executive Council

- Texas Alcoholic Beverage Commission

- Texas Alcoholics Anonymous

- Texas Association of Counties

- Capitol Area Council of Governments

- Alamo Area Council of Governments

- Texas Municipal Human Resources Association
Adoption of Program

- Over 150 agencies trained on or using DPS Model
- Almost 100 agencies have requested customized forms to start process of using DPS Model or have completed a Demographic Performance Observation
  - Sample of Type of Agencies includes but is not limited to:
    - Addison Police Department
    - Amarillo Police Department
    - San Marcos Police Department
    - Comal County Sheriff’s Department
    - Grayson County Sheriff’s Department
    - Baylor University Police Department
    - Trinity University Police Department
    - Newnan, Georgia Police Department
    - Saint Paul, Minnesota Police Department

- Outside agencies acclimated to DPS Physical Fitness Model and Resiliency Model provide support/back-up to DPS in the line of duty with healthier, fitter LEOs which contribute to elevation in Officer Safety and De-Escalation and vice-versa
Awards and Citations

• Due to the success, dedication and investment in developing the DPS Physical Fitness Testing and Assessment Model; as well as Policy for Chapter 8 of the TXDPS General Manual – the Fitness Wellness Unit received recognition in the following formats:

  • Unit Citation

  • Chair Award – 100 Club of Texas
Personal Impact

Numerous lives within DPS have been impacted well beyond just meeting criteria of the policy

• 52 year old Trooper, Sinton, TX
  • Was 262 pounds with 46.5” waist at end of January
  • Improved eating habits, added exercise, cut overeating and snacking
  • Now 198 pounds with 37 ¾” waist at start of July

• 47 year old Trooper, New Braunfels, TX
  • Lost over 70 pounds
  • Impact on ability to do things enjoyed
  • Now can play with his kids
Personal Impact

Numerous lives within DPS have been impacted well beyond just meeting criteria of the policy

• 31 year old Trooper, Manvel, TX  
  • Was 301 pounds with 46” waist at start of March  
  • High cholesterol, blood pressure and blood sugar levels  
  • Main changes were in regards to how I improved eating habits and added exercise  
  • On my last doctor’s visit, my cholesterol, blood pressure and blood sugar levels are much better  
  • Now 244 pounds with 38” waist in September

“I knew the new Command Presence policy was coming, but I chose to have healthier longer lasting life.”
Personal Impact

Numerous lives within DPS have been impacted well beyond just meeting criteria of the policy

• 52 years old, 25 years with DPS - I had never stepped foot in a gym since I left recruit school 24 years ago.

• On high blood pressure and cholesterol medication along with having two echocardiograms and stress tests because of tightness in my chest, and I would get exhausted easily when I walked a few feet, or climbed stairs

• Started eating healthier foods. Foods that I limited or eliminated from my diet included tortillas, breads, conchas and sugar. I began drinking more water and stopped eating after 9pm.

• My workout regime consists of rowing, running and light weights three days a week.

• In a few months:
  • weight went from 235lbs to 181lbs
  • Waist went from 41 inches to 38 inches.
  • Most importantly, my quality of life has improved.
  • Had not been comfortable in my bullet proof vest for a long time until now.
  • Was able to pursue suspect on foot & apprehend suspect - whereas not sure would have before

“We have to be ready for the fight, because we are no longer fighting the weak; we are now fighting individuals with no respect for the law. At the end of the day, you must survive and go home to your family.”
Dr. Ralph Bovard
MD MPH CCD FACSM FACPM FACOEM
Program Director
Occupational & Environmental Medicine Residency
HealthPartners Medical Group

Education
MD degree: University of Minnesota: Minneapolis, MN; 1980-84.
BA Literature, magna cum laude, & PBK: St. Olaf College: Northfield, MN; 1973-76.

Board Certifications
Occupational Medicine: 2017-2027- American Board of Preventive Medicine (ABPM)

Fellowships
Fellow (FACSM) of American College of Sports Medicine
Fellow (FACOEM) of American College of Occupational & Environmental Medicine
Fellow (FACPM) of American College of Preventive Medicine

Publications
Over 20 Peer Reviewed Publications and numerous presentations covering first responder occupational health challenges and issues

Appointments and Honors
Adjunct Assistant Faculty, U. of MN School of Public Health-present
Perfect Fit Health: Strategic Medical Advisor; 2009- present.
CMO, Co-founder & Board of Directors- Exos Corporation: August 2007-2010.
Didactic instructor for Regions Hospital Occupational Medicine Residency; 2000-present.
Physical Activity Focus Group (chair); Gundersen-Lutheran Medical Center; 1998-2000.

Grants:
Hologic Inc: “Development of a Cardiorespiratory Risk Surveillance Score via Comparison of Body Composition Methods, Cardiorespiratory Fitness, and Obesity in Firefighters”; PI-Zeke McKinney MD MPH, Ralph Bovard MD MPH, Kevin Ronnenberg MD, Gabriella Vazquez-Benitez PhD, MS, & Nicolaar P. Pronk PhD. (2018-present)
RED Grant: HealthPartners Institute- “Health Disparities in Occupational Medicine”. Fozia Abrar MD, Ralph Bovard MD, Zeke McKinney MD, Karyn Leniek MD, Paul Anderson MD, Emily Bannister MD, & Kirsten Koos MD. (2017-present)
Dr. Matt Wagner, Ph.D.

Associate Professor
Department of Kinesiology
Sam Houston State University

Research focus in the area of performance improvement. Particularly the areas of performance improvement for athletes, law enforcement and correctional employee fitness

Continuing research focus within physical fitness and law enforcement. Examining inflammatory markers in law enforcement officers.

Education
• Ph.D. in Kinesiology from Texas A&M University
• Master’s degree in Kinesiology from Sam Houston State University
• Bachelor’s degree in in Law Enforcement/Criminal Justice from Sam Houston State University

Honors and Awards
• EURECA Grant (Enhancing Undergraduate Research Experiences and Creative Activities)
• Board member on the Training and Education division of the Office of Inspector General- Texas Department of Criminal Justice
• Law Enforcement Management Institute of Texas at Sam Houston State University for investigation regarding impact of behavioral change in diet and exercise on key biomarkers in a multicultural senior law enforcement population.
• Innovative Fitness grant for the investigation of the effects of plyometric training on agility
• Serves as a Board Defense Member on the Texas DPS Advance Physical Fitness Institute – Advance Physical Fitness Testing and Assessment Instructor Training Program
• American Correctional Association and Texas Correctional Association speaker on importance of health and wellness for correctional employees
• Director of the National Institute of Preventive Medicine, an organization dedicated to certifying and educating personal trainers
• Co-authored a book “Getting Healthy: 50 lessons on Fitness for Law Enforcement”
Dr. Jonathan Sheinberg

Baylor Scott & White Health
MD, FACC

Dr. Sheinberg is a board-certified invasive cardiologist. Practicing general cardiology and lipidology.

*Dr. Sheinberg is a sworn police officer and sits on the Department of Justice's Officer Safety and Wellness Working Group, part of the Presidential Task Force on 21st Century Policing.*

*Travels throughout the US, as well as internationally, speaking on the creation of wellness and safety initiatives for public safety agencies.*
Legal Requirement

Texas Government Code: 614.172

• Each law enforcement agency shall adopt physical fitness programs that a law enforcement officer must participate in and physical fitness standards that a law enforcement officer must meet.
• ...the Department of Public Safety shall develop criteria that include physical fitness and appearance standards that must be met prior to any commissioned peace officer receiving a pay increase or promotion...
Physical Conditioning vs. Physical Fitness

• While valuable and necessary, physical conditioning is just one aspect of overall physical fitness or readiness.

• General Manual references:
  • ...to be physically fit to perform their duties (05.06.03)
  • ...shall keep themselves in good physical condition (05.62.00)
  • ...and to maintain the physical health required to carry out their duties (05.63.00)
  • ...officers in maintaining a high degree of physical conditioning and good health by providing a periodic evaluation and assessment (08.14.00)
  • ...Each officer has an individual responsibility to maintain a level of fitness that permits him/her to carry out job responsibilities and safely handle any situation that may arise (08.14.00)
Commissioned Core Competency

• Tactical Preparedness includes:
  • ...maintaining a high degree of physical conditioning and professional appearance;
  • ...it requires they maintain a high degree of physical preparation;
  • ...it requires they remain physically prepared to immediately respond to threats.

• This standard of physical fitness requires more than just physical conditioning and exercise – it also requires that our officers maintain an appropriate lifestyle of nutrition and overall wellness to ensure they are physically capable.
Impact to Job Duties

• In addition to the personal impact of serious health conditions associated with obesity, there are tangible impacts to performance and operations.
  • Reduced Command Presence
  • Reduced mobility
  • Reduced reaction time
  • Increased safety risk to self, public, and fellow officers
  • Cost of equipment *(uniforms; belts; vests; etc)*
Impact to Job Duties - Injury and Missed Work

• “Not only did officers who are overweight experience injuries that were more severe, but they also were found to miss more work days and require longer rehabilitations.

• “Those who reported a healthy weight, as classified by BMI, missed almost half as many days after an injury as those who were overweight.

• “These findings provide strong evidence of the connection between weight and injury severity and recovery.

• “Findings show that there are certain groups and types of officers who are more likely to experience injuries, including those who are...overweight.” (IACP – The Impact of Fitness and Weight on Injuries)

• “Police officers have been shown to be overweight and therefore face higher rates of injury by sheer increase in force on joints and soft tissues.” (The Sports Journal – The Need for Law Enforcement Wellness Interventions: A Critical Review)
Physical Fitness Policy & Command Presence Protocol
(as approved by the PSC – February 2019)

• September 2019 implemented dual compliance requirement:
  • Must maintain 70 percent or greater on Physical Fitness Testing (PFT)
  • **AND** must be in compliance with the Command Presence Policy

• The award of earned Fitness Leave based on PFT performance will be contingent on the successful passing of both prongs.
First Year Implementation

• September 1, 2019 - The CP assessment approved by the PSC in February will be integrated into the fall testing cycle. Meeting any one of the three CP assessment thresholds will establish compliance. For the first year, there will be a 2 percent allowance in the CP thresholds.

  • This provides a full inch allowance to both genders in the waist measurement;

  • On the height and weight chart for example, it would provide a 4 pound allowance for someone needing to meet a 200 pound standard; and

  • It offers 2 full percentage points on the third assessment.
First Year Implementation

• December 1, 2019 – commissioned employees who fail to achieve the required PFT standard or CP standard in the Fall Testing Cycle will be placed on a Fitness Improvement Plan.

• Current mandatory consequences for failing to meet PFT standards remain unchanged (ineligible for promotional process and prohibition of secondary employment using commission/uniform).

• Additional consequences for failing the PFT standard may include temporary removal from enforcement role and no overtime allowance. Determinations to temporarily reassign or restrict overtime will be made by the Deputy Director over the employee’s division.

• For the Fall 2019 testing cycle, failure to meet the CP standard will not result in the mandatory or additional consequences referenced above. However, compliance with the fitness improvement plan, which will include benchmarks toward compliance, will be required. Failure to comply with a fitness improvement plan can result in administrative consequences including those mentioned above.
First Year Implementation

• June 1, 2020 – commissioned employees who fail to achieve the required PFT standard or CP standard in the Spring Testing Cycle will be placed on a Fitness Improvement Plan.

• Current mandatory consequences for failing to meet PFT standards remain unchanged (ineligible for promotional process and prohibition of secondary employment using commission/uniform).

• Additional consequences for failing the PFT standard may include temporary removal from enforcement role and no overtime allowance. Determinations to temporarily reassign or restrict overtime will be made by the Deputy Director over the employee's division.

• Employees on a fitness improvement plan from the fall cycle for CP non-compliance who are meeting all the plan requirements and showing continuous progress toward compliance may remain on the plan without consequence.

• Compliance with a fitness improvement plan, which will include benchmarks toward compliance, will be required. Failure to comply with a fitness improvement plan can result in administrative consequences including those mentioned above.
First Year Implementation

• August 2020 - the FWU will analyze the two testing cycles of data collected on the PFT and CP assessments and their findings will be reported to the PSC at that month’s meeting.
Second Year Implementation

• September 1, 2020 – the CP standards approved by the PSC take effect. No allowances.

• December 1, 2020 – commissioned employees who fail to achieve the required PFT standard or CP standard in the Fall Testing Cycle will be placed on a Fitness Improvement Plan
• Mandatory consequences for failing to meet PFT standards or CP standards will be applied.
• Additional consequences may include temporary removal from enforcement role and no overtime allowance. Determinations to temporarily reassign or restrict overtime will be made by the Deputy Director over the employee’s division.

• From initial notification of intent to implement in October 2018 until the first possible administrative sanction for non-compliance could be applied in December 2020, personnel will have had more than 25 months to achieve compliance.
Review

• Fitness and health are directly related to the job duties of a commissioned officer.

• From 2006-2011, the program evolved from an absolute standard to age and gender normed as directed by statute.

• From 2011-2017, minimum passing standards for the physical conditioning assessments were increased from 25% (“poor”) to 50% in 2013 (“fair”) to 70% in 2017 (“good”).

• The Command Presence threshold focuses on obesity and obesity’s impact to fitness and health which are directly related to the job duties.

• Recognized experts in the fields of fitness and health were consulted over the evolution of the program.

• Both the PFT and CP assessments are based on generally accepted scientific standards.
GC 411.0045 Physical Fitness Programs

• The commission shall adopt:

  • (1) physical fitness programs in accordance with Section 614.172
    ➢ Directly related to job duties
    ➢ Consistent with generally accepted scientific standards

  ; and

• (2) a resolution certifying that the programs adopted under Subdivision (1) are consistent with generally accepted scientific standards and meet all applicable requirements of state and federal labor and employment law.