

# Functional Ability Evaluations (FAE)

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# COMMON TERMS

## Impairment

- *“In the context of health experience, an impairment is any loss or abnormality of psychological, physiological, or anatomical structure or function”*

## Disability

- *“In the context of health experience, a disability is any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being*

## Handicap

- *“In the context of health experience, a handicap is a disadvantage for a given individual, resulting from an impairment or a disability, that limits or prevents the fulfilment of a role that is normal (depending on age, sex, and social and cultural factors) for that individual*
- An impaired individual who is able to accomplish a specific task with or without accommodation is neither handicapped nor disabled with regard to that task.

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# *PURPOSE OF FAE*

# FAE Protocol

**Purpose of FAE/FCE – to collect reliable information about current vocational status & estimate potential vocational status.**

**The Protocol: The protocol was developed after an extensive literature review by a multi-disciplinary team of professionals including physicians, physical and occupational therapists, exercise physiologists, kinesiologists, nurse case managers and vocational professionals. The protocol is designed to be a comprehensive assessment of the patient's functional abilities. A typical evaluation takes up to 4 hours. The evaluation itself is comprised of a variety of components, which have independent and interrelated value in determining a patient's safe functional ability over the course of an 8-hour day.**

# F AE Systems/Protocol

**ARCON**

**Matheson**

**Workwell**

**BTE**

**Metrics**

**All systems incorporate standardized testing protocols**

# Physical Demand Characteristic (PDC) of Work

<b>Physical Demand Level</b>	<b>Occasional 0-33% work day</b>	<b>Frequent 34-66% of workday</b>	<b>Constant 67-100% of workday</b>
<b>Sedentary</b>	<b>10 lbs</b>	<b>Negligible</b>	<b>Negligible</b>
<b>Light</b>	<b>20 lbs</b>	<b>10 lbs</b>	<b>Negligible</b>
<b>Medium</b>	<b>20-50 lbs</b>	<b>10-25 lbs</b>	<b>10 lbs</b>
<b>Heavy</b>	<b>50-100 lbs</b>	<b>25-50 lbs</b>	<b>10-20 lbs</b>
<b>Very Heavy</b>	<b>Over 100 lbs</b>	<b>Over 50 lbs</b>	<b>Over 20 lbs</b>

# Disability Factors (Effort Validity & Reliability)

**An FAE tests for maximum effort determination and subjective reports of symptoms that are inconsistent or exaggerated when compared to objective evidence.**

**Observed behaviors are compared and contrasted to the patient's perception of abilities and self reported symptomology.**

**The ARCON system automatically calculates up to 70 reliability measures. In addition other factors such as heart rate changes, quality and speed of movement patterns, accessory muscle recruitment, force curve analysis and temperature, skin and color changes are also analyzed and recorded. These are then compared to the client's deficits that are specifically related to the disabling condition.**

**Distraction techniques, such as those employed with Waddell's non-organic are also incorporated into the testing protocol.**

# Disability Factors (Effort Validity & Reliability)

- Even if a claimant declines most FAE tests, if the validity and reliability checks are not passed then the report is still valuable in suggesting that he/she can do more than they are conveying to the various parties.



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# *COMPONENTS OF FAE*

# F AE Components

- **Patient History & job info (45 min)**
- **Pain scales & standardised questionnaires. (15 min)**
- **MSK assessment (15 min)**
- **ROM measurements (15 min)**

## Functional Testing (up to 2 hours)

- **Grip Strength**
- **Dexterity**
- **Reaching**
- **Handling**
- **Mobility (walking, stair climbing)**
- **Lifting, carrying, pushing & pulling**

# Hand Dynamometer

Grip test

Grip  
Effort



# Dexterity tests

## Fingering Tests



# Handling

- Handling using MTM Cube



# Mobility

- Crouching/squatting.
- Kneeling/floor mobility.
- Repetitive movement screening.
- Stairs.
- Ladder mobility.



# Lifting Tests

## Lift Capacity

Tests occasional and frequent lifting.

### 3 levels:

Waist -> Shoulder

Waist -> Floor

Floor -> Shoulder

Standardised shelf heights.

How would you rate the difficulty of this lift? Scale of 1-9.



# Carrying, Pushing, Pulling

## Push/pull

- Measure with Force gauge.



## Carrying





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# *ELEMENTS OF FAE REPORT*

# Elements of FAE Report

**Job match tables**

**Physical effort & Validity Findings**

**Patient Strength Demand Rating**

**Conclusions & Recommendations**

**FAE data (Appendix)**

# Job Match Table

## Recycling Truck Driver

Activities Rated by Strength Level						
Activity	FCE Performance (PDC Category)	Equivalent Strength Level			Job Demand (PDC Category)	Deficit
		Occasional 0 to 2.6 hours/day	Frequent 2.7 to 5.3 hours/day	Constant 5.4 to 8 hours/day		
Low Lift (floor to knuckle)	Light	11 - 20 lb	1 - 10 lb	negligible	Medium	Yes
Mid Lift (knuckle to shoulder)	Light	11 - 20 lb	1 - 10 lb	negligible	Medium	Yes
Carry	Medium	21 - 50 lb	11 - 25 lb	1 - 10 lb	Medium	No
Push (static)	Medium	21 - 50 lb	11 - 25 lb	1 - 10 lb	Heavy	Yes
Pull (static)	Medium	21 - 50 lb	11 - 25 lb	1 - 10 lb	Heavy	Yes
Activities Rated by Frequency and Duration						
Activity	FCE Performance			Job Demand	Deficit	
Walk	Frequent			Frequent	No	
Climb (stairs)	Occasional			Occasional	No	
Stoop	Occasional			Frequent	Yes	
Kneel	Declined			Occasional	Unable to determine	
Crouch	Declined			Frequent	Unable to determine	
Reach Immediate	Left: (Front) Constant	Right: (Front) Constant		Frequent	No	
Reach Overhead	Left: (Front) Frequent	Right: (Front) Frequent		Occasional	No	
Handling	Left: Constant	Right: Frequent	Both: n/a	Constant	Yes	
Fingering	Left: Frequent	Right: Frequent	Both: n/a	Never	No	
Sitting	Frequent			Frequent	No	
Standing	Constant			Frequent	No	
Other Activities						
Grip/Grasping Strength (Dynamometer Position 2)	Left: 71 lb		Right: 58.3 lb			

# Coefficient of Variance (CV)

Figure 1 – Percent of Industrial Standard Rating Chart																
Activity	Date	CV <sup>2</sup>	%IS	<30	40	50	60	70	80	90	100	110	120	130	140+	
Walking - 12 Ft	2022-01-07	3.8	89.2	[Bar chart showing 89.2% of IS rating]												
Carrying - 10 Lb	2022-01-07	3.6	105.6	[Bar chart showing 105.6% of IS rating]												
Carrying - 20 Lb	2022-01-07	Incomplete Test		[Bar chart showing incomplete test]												
Carrying - 50 Lb	2022-01-07	Incomplete Test		[Bar chart showing incomplete test]												
Bending	2022-01-07	n/a	53.3	[Bar chart showing 53.3% of IS rating]												
Crouching	2022-01-07	Incomplete Test		[Bar chart showing incomplete test]												
Kneeling	2022-01-07	Incomplete Test		[Bar chart showing incomplete test]												
Reach Immediate (L)	2022-01-07	<u>13.2</u>	136.7	[Bar chart showing 136.7% of IS rating]												
Reach Immediate (R)	2022-01-07	<u>11.0</u>	106.3	[Bar chart showing 106.3% of IS rating]												
Reach Overhead (L)	2022-01-07	<u>6.7</u>	90.1	[Bar chart showing 90.1% of IS rating]												
Reach Overhead (R)	2022-01-07	<u>7.7</u>	77.9	[Bar chart showing 77.9% of IS rating]												
Handling (L)	2022-01-07	<u>4.1</u>	117.4	[Bar chart showing 117.4% of IS rating]												
Handling (R)	2022-01-07	<u>8.7</u>	82.5	[Bar chart showing 82.5% of IS rating]												
Fingering (L)	2022-01-07	<u>11.4</u>	96.6	[Bar chart showing 96.6% of IS rating]												
Fingering (R)	2022-01-07	<u>12.3</u>	74.1	[Bar chart showing 74.1% of IS rating]												
Climbing Stairs - 8 stairs	2022-01-07	1	66.4	[Bar chart showing 66.4% of IS rating]												
				<30	40	50	60	70	80	90	100	110	120	130	140+	
<b>PDC Category</b> →				<b>Occasional<sup>3</sup></b>				<b>Frequent<sup>4</sup></b>			<b>Constant<sup>5</sup></b>					

**Coefficient of Variance.** If value is underlined, CV calculated for multiple test sets. For CV > 10%, value is shaded to call attention to results that may indicate a problem in consistency or ability to perform this task.

# Consistency & Effort

As a general guideline, if greater than 80% of the evaluatee's repeated tests showed a co-efficient of variance less than 10-15%, the assessment results are considered valid. If less than 80% of the evaluatee's repeated tests showed a co-efficient of variance less than 10-15%, the assessments results are considered invalid. However, consideration is given to other factors including; completion of all tests, exaggerated body mechanics/effort, consistency between formal testing vs. observation and competitive tendencies.



# Consistency & Effort

Mr. Mo Degross demonstrated an undetermined effort in this evaluation, with 18 out of 29 consistency measures recorded as reliable (62%). (Unreliable measures show "Marginal" or "No" in the **Reliable** column in Table 1, below.)

Table 1 – Reliability and Consistency of Effort				
Test	Result	Expected	Measure	Reliable
Position 1 - Left	28.8%	< 15%	CV	No
Position 1 - Right	25.7%	< 15%	CV	No
Position 2 - Left	13.3%	< 15%	CV	Yes
Position 2 - Right	10.7%	< 15%	CV	Yes
Position 3 - Left	19.7%	< 15%	CV	Marginal
Position 3 - Right	11.7%	< 15%	CV	Yes
Position 4 - Left	13.6%	< 15%	CV	Yes
Position 4 - Right	26.7%	< 15%	CV	No
Position 5 - Left	9.2%	< 15%	CV	Yes
Position 5 - Right	26.7%	< 15%	CV	No
5-Position Grip Left	2	2 or 3	Peak	Yes
5-Position Grip Left	9.2	> 7.5	SD	Yes
Peak Grip vs. Norm Left	71.0 lb	> 67.9	2*SD	Yes
5-Position Grip Right	2	2 or 3	Peak	Yes
5-Position Grip Right	7.9	> 7.5	SD	Marginal
Peak Grip vs. Norm Right	58.3 lb	> 77.4	2*SD	No
Walking	3.8%	< 10%	CV	Yes
Carrying 10 Lb	3.6%	< 10%	CV	Yes
Reach Immediate (Front) Right	11.1%	< 10%	CV	Marginal
Reach Immediate (Front) Left	13.2%	< 10%	CV	Marginal
Reach Overhead (Front) Right	7.8%	< 10%	CV	Yes
Reach Overhead (Front) Left	6.7%	< 10%	CV	Yes
Handling Right	8.7%	< 10%	CV	Yes
Handling Left	4.1%	< 10%	CV	Yes
Fingering Right	12.4%	< 10%	CV	Marginal
Fingering Left	11.5%	< 10%	CV	Marginal
Climbing Stairs	1.0%	< 10%	CV	Yes
Push	7.0%	< 15%	CV	Yes
Pull	2.0%	< 15%	CV	Yes

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# *FAE QUESTIONS*

# Questions Addressed from FAE

**An FAE does NOT address questions regarding *diagnosis***

**An FAE determines if the patient substantially satisfied the essential physical tasks to perform their:**

Pre-accident employment tasks

Pre-accident activities of daily living

**An FAE can make recommendations re:**

modified or graduated return to work

Physical restrictions related to RTW



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# *WHEN IS AN FAE INDICATED?*

# Indications for an FAE

## Income Replacement Determination

Patient continues to be off work and the pre-accident vocation consists of physical and/or repetitive components.

Due to severity of injuries, clarification is required as to whether the patient will be able to return to their pre-accident vocation. If not, physical ability parameters are proposed so that VOC assessor can propose other occupations.

## Housekeeping & Home Maintenance Determination

This benefit is usually addressed by an OT in the home environment

FAE may be indicated if there is physical requirement outside the “normal” as aspects of ADL’s (i.e. large property with more physical home maintenance requirements)

## Determining Disability

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*WHEN IS AN FAE NOT  
INDICATED?*

# F AE Not Indicated

## **When the accident related condition is unstable**

Pre or post-operatively

Unstable medical conditions (i.e. cardiac or neurological)

## **Certain populations or pre-accident medical conditions**

Elderly may not be able to perform the majority of FAE tests

Pre-accident medical conditioning puts the patient at risk

Pregnancy

## **Specific scenarios based on careful review of the file**

Injuries are relatively minor and pre-accident job is sedentary

Injuries are very severe and job physically straining – FAE may be deferred until condition has improved and RTW is more feasible

# F AE Not Indicated

- **In most cases, with a good understanding of the file & injuries, the decision whether an FAE is required becomes easier.**

# COVID-19

The appropriate precautions were implemented during this assessment which included the following:

- Administration of Covid-19 Screening Questionnaire
- Social distancing measures implemented in waiting room and assessment office (when possible)
- Personal Protective Equipment (PPE) provided to the evaluatee (mask and surgical gloves)
- Sneeze guards installed in assessment office

The following table is a summary/outcome of the screening measures implemented in the assessment of the claimant:

Screening/Protective Measure	Outcome
Temperature (measured using infrared touchless thermometer)	36.5 Celsius
Covid-19 Screening Questionnaire	Administered – no risk factors identified
PPE – Surgical Gloves	Provided
PPE – Face covering/mask	Brought own

# What to look for in a good FAE report

- All the key load and frequency tests are administered
- Primary conclusion should be gathered from **objective measures** – Coefficients of variations and % of tests that passed validity threshold.
- Conclusions can be supplemented with informal observations – if tests were attempted before terminated or just declined outright. Sitting and informal walking observations. **WHY** tests were not performed is documented.
- An objective report should not contain language such “pain focused” as may be perceived as biased.

# Common Misconceptions

**Patients often think that it is better to decline the FAE tests versus completing them because they will be “forced” to go back to work.**

Not true! Declining tests without effort indicates a low motivation to return to work. Attempting tests, even if they are incomplete and don't meet the job demands is much more supportive to the patient.



# Common Misconceptions

## Is an FAE with invalid effort still useful?

Yes! An invalid FAE documents objective measures of effort validity and assists the medical evaluator in determining whether there is in fact an injury that causes a disability or low motivation to return to work.

Often times, the performance during an FAE is consistent with the performance during an independent medical exam and the courts/adjudicators take note of consistency across multiple assessments.

# Cognitive FAE's

A Cognitive Functional Capacity Evaluation assesses the functional impairment of a subject's memory, attention, planning, problem solving, learning, impulsivity and tolerance for multiple demands in addition to physical demands tested in conventional FAE's

Administer appropriate quantitative and qualitative standardized tests and measures.

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*QUESTIONS?*