BlueCross BlueShield of North Carolina

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Corporate Medical Policy

Diagnosis of Idiopathic Environmental Intolerance AHS – G2056

File Name:	diagnosis_of_idiopathic_environmental_intolerance
Origination:	01/2019
Last CAP Review:	11/2020
Next CAP Review:	11/2021
Last Review:	04/2021

Description of Procedure or Service

Description
Idiopathic environmental intolerance (IEI), formerly called multiple chemical sensitivity (MCS), is a subjective condition characterized by recurrent, nonspecific symptoms attributed to low levels of chemical, biologic, or physical agents in the absence of consistent objective diagnostic physical findings or laboratory tests that define an illness (AAAAI, 1999; ACOEM, 1999; D. Black & Temple, 2019).

Related Policies
Allergen Testing AHS – G2031
Intracellular Micronutrient Analysis AHS – G2099

******Note: This Medical Policy is complex and technical. For questions concerning the technical language and/or specific clinical indications for its use, please consult your physician.***

Policy

Diagnosis of idiopathic environmental intolerance is considered investigational. BCBSNC does not provide coverage for investigational services or procedures.

Benefits Application

This medical policy relates only to the services or supplies described herein. Please refer to the Member's Benefit Booklet for availability of benefits. Member's benefits may vary according to benefit design; therefore member benefit language should be reviewed before applying the terms of this medical policy.

When Diagnosis of Idiopathic Environmental Intolerance is covered

Not applicable.

When Diagnosis of Idiopathic Environmental Intolerance is not covered

1. Reimbursement is not allowed for laboratory tests designed to affirm the diagnosis of idiopathic environmental illness.

2. Reimbursement is not allowed for the screening of blood, saliva, serum, plasma, urine, and/or stool samples for volatile solvents, organic acids, and organophosphates in all circumstances including but not limited to the following compounds:

    a. 2-methylhippurate

b. 2-methylpentane

c. 3-methylpentane

d. 3,4-dihydroxyphenylpropionate

e. 4-nonylphenol

f. alpha-keto-beta-methylvalerate

g. alpha-ketoisovalerate

h. arabinitol

i. atrazine or atrazine mercapturate

j. benzene

k. benzoate

l. bisphenol A (BPA)

m. diethydithiophosphate (DEDTP), diethylthiophosphate (DETP), dimethyldithiophosphate (DMDTP), dimethylthiophosphate (DMTP)

n. ethylbenzene

o. hexane

p. Hippurate

q. Indican

r. Picolinate

s. Polychlorinated biphenyls (PCBs)

t. Quinolinate

u. Styrene

v. Taurine

w. Toluene

x. Triclosan

y. Xylene

3. Reimbursement is not allowed for phthalates and parabens profiling using a blood, serum, plasma, saliva, urine, and/or stool sample.

4. Reimbursement is not allowed for chlorinated pesticides, including DDE and DDT, profiling in asymptomatic patients using a blood serum, plasma, saliva, urine, and/or stool sample.

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5. Reimbursement is not allowed for testing blood, serum, plasma, saliva, urine, and/or stool samples for carnitine sufficiency, oxidative stress and antioxidant sufficiency, detoxification adequacy, methylation sufficiency status, lipoic acid and CoQ10 sufficiency, and/or intestinal hyperpermeability in asymptomatic individuals and/or during general encounters. These tests include, but are not limited to, the following:

    a. Amino acid testing except for newborn screening and for documented metabolic disorders.

    b. Carotene/beta-carotene

    c. Citrate

    d. Vanillylmandelic acid (VMA) testing except for use in diagnosis of neuroblastoma or neuroendocrine tumors or for monitoring effectiveness of treatment of cancer

    e. Homovanillic acid (HVA) testing except for use in diagnosis and evaluating neuroblastomas

    f. 5-hydroxyindolacetic acid (5-HIAA) testing except for use in diagnosis and evaluating carcinoid syndrome or for staging, treatment, and surveillance of suspected neuroendocrine tumors

    g. Elastase except for pancreatic insufficiency

    h. Fat differentiation testing, qualitative and quantitative

    i. CoQ10

6. Reimbursement is not allowed for testing blood, serum, plasma, saliva, urine, and/or stool samples for vitamin sufficiency, mineral sufficiency, and/or nutritional analysis in asymptomatic individuals and/or during general encounters without abnormal findings. These tests include, but are not limited to, the following:

    a. Amino acid testing except for newborn screenings or for documented metabolic disorders

    b. Allergen-specific IgG testing for screening food sensitivities, vitamin sufficiency, or mineral sufficiency

    c. Carotene/beta-carotene

    d. Citrate

    e. Vanillylmandelic acid (VMA) testing except for use in diagnosis of neuroblastoma or neuroendocrine tumors or for monitoring effectiveness of treatment of cancer

    f. Homovanillic acid (HVA) testing except for use in diagnosis and evaluating neuroblastomas

    g. 5-hydroxyindolacetic acide (5-HIAA) testing except for use in diagnosis and evaluating carcinoid syndrome or for staging, treatment, and surveillance of suspected neuroendocrine tumors

    h. Lipid peroxides

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i. Behenic acid

j. Lignoceric acid

k. Fat differentiation testing, qualitative and quantitative

l. Prealbumin

7. Reimbursement is not allowed for the use of a breath hydrogen and/or breath methane test to assess or diagnose the following conditions:

a. Idiopathic environmental intolerance

b. Food allergies and sensitivities

c. Carbohydrate sensitivity or intolerance, including but not limited to, lactose sensitivity, lactose intolerance, and/or lactase deficiency

d. Bacterial overgrowth, including but not limited to, small intestinal bacterial overgrowth [SIBO]

e. Digestive disorders

f. Constipation, diarrhea, or flatulence

g. Neurological/neuromuscular disorders, including but not limited to, Parkinson disease and fibromyalgia

h. Rosacea

i. Obesity

j. As part of a wellness visit and/or general encounter without abnormal findings

8. Reimbursement is not allowed for testing blood, serum, urine, cerebrospinal fluid, fingernails, hair, and/or stool sample for metals, including but not limited to, aluminum, arsenic, cadmium, chromium, copper, lead, magnesium, manganese, mercury, molybdenum, nickel, zinc, and heavy metals not otherwise specified in asymptomatic individuals and/or general encounters without abnormal findings.

Policy Guidelines

Background

Patients with idiopathic environmental intolerance (IEI) typically report sensitivity to multiple, chemically unrelated substances and become ill due to a wide range of nonspecific symptoms when exposed. Symptoms may include anxiety, shortness of breath, chest pain, and more. Psychiatric disorders may also be at the core of the IEI patient (D. Black & Temple, 2019). The mean age of patients reporting IEI is between 30 and 40 years, women are diagnosed more than men, and individuals who are married are significantly more likely to be diagnosed with IEI than those who are not (D. Black & Temple, 2019). IEI also occurs in 40% of people with chronic fatigue syndrome and in 16% of people with fibromyalgia (D. W. Black, Carver, & Carver, 2020).

The symptoms of IEI are nonspecific, ambiguous and common in the general population. There is no characteristic set of symptoms and ultimately no major differences between patients self-reporting IEI and those that do not. Virtually any symptom can be considered a symptom of IEI (D. Black & Temple,

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2019). Within the definition of multiple chemical sensitivity, identified symptoms included "asthmatic-like, skin irritation, dermatitis, migraine, dysuria, dyspepsia, symptoms of supposed sensitization to food, persistent arthromial pain, vertigo, vestibular impairment," with 80% of patients experiencing "asthenia, arthromial pain, dyspepsia, coriza, eructation, chest pain, insomnia" (Quarato et al., 2020). The classification of IEI as a distinct medical disorder is also in question, as a lack of reliable case reports, lack of consistent findings or laboratory results, and reliance on surveys or self-reporting all cloud the condition and understanding of this disorder (D. Black & Temple, 2019).
Recently, many articles have been published suggesting a relationship between electromagnetic fields and IEI. Electromagnetic fields may include radiofrequencies from telecommunication devices (Eltiti, Wallace, Russo, & Fox, 2018; Huang, Cheng, & Guo, 2018), Wi-Fi and base stations (ANSES, 2018). For an unknown reason, these individuals claim to react to the exposure of certain electromagnetic triggers that most people can tolerate without issues; these triggers are below established toxicological and hazardous thresholds. ANSES (2018) researched the relationship between electric field exposure and IEI symptoms and stated that "either the symptoms experienced by EHS individuals are not caused by exposure to electromagnetic fields and there are no quantifiable biological and/or physiological abnormalities when they are exposed to electromagnetic fields (assumption 1) or the absence of results is due to the methodological limitations of the provocation studies (subject selection, sample size, exposure type, etc.) (assumption 2)." These findings were corroborated by Schmiedchen, Driessen, and Oftedal (2019), who, in their systematic review of articles pertaining to EHS, stated, "limitations in design, conduct and analysis could therefore have given rise to either false positive for false negative results," and that the "nocebo effect or medical/mental disorders may explain the complaints in many individuals." Characteristic symptoms of electromagnetic hypersensitivity include sleep and circadian rhythm disorders, migraines and headaches, hypersensitivity, and other related syndromes and disorders such as fibromyalgia, tinnitus and multiple chemical sensitivity (ANSES, 2018).

Tests such as elimination diets, food challenges, and provocation-neutralization tests have been used to test for food or chemical sensitivities. Immunological tests or tests measuring the amount of various chemicals in body tissues have also been performed (D. Black & Temple, 2019). In fact, testing for a wide range of autoantibodies is generally discouraged, as "pretest probability is low, and false-positive results are far more likely than true-positive results; a weakly positive ANA [antinuclear antibodies] is present in about 20% of the population" (D. W. Black et al., 2020). However, these assessments are typically not rigorous enough to provide strong evidence; for example, these tests are often not performed blinded or with placebo controls. No unusual laboratory findings have been reliably linked to IEI (D. Black & Temple, 2018, 2019). Due to the vast amount of causes, symptoms, responses, and general heterogeneity of this condition, it may be very difficult to provide a scientifically valid or useful test. Worse, testing may even exacerbate or increase the number of symptoms of a patient. Physicians should use caution in testing for reassurance of patients as negative findings may increase anxiety instead (Barsky & Borus, 1999; D. Black & Temple, 2019).

Due to the number of symptoms that may be considered part of IEI, there are a corresponding amount of tests performed. These tests are generally unnecessary as the condition itself is far too ambiguous to reliably test for and any test can be ordered under the guise of IEI. For example, assessment of factors such as elastase, stool culturing, or fat differentiation may all be done for the sake of IEI treatment. These tests may have legitimate medical purposes (for instance a stool culture may be useful for numerous conditions) but their use for IEI is essentially none, as IEI itself carries no reliable characteristics to test for. Other tests that evaluate a tangentially relevant analyte, such as micronutrient panels or a lactose intolerance breath test, may be done for IEI's sake as well. Since virtually any symptom or sign can be called IEI, these tests are sometimes ordered for nonspecific or subjective symptoms such as fatigue or pain. However, these tests cannot provide any useful results because of the dubious nature of IEI itself.

Another commonly used test for IEI are panels that test multiple factors in one. For example, the Triad Bloodspot Profile offered by Genova Diagnostics measures organic acid levels, "the level of IgG4 reactions for 30 common foods," and "essential amino acid imbalances" (Genova, 2021d). Genova offers several similar panels, such as the Organix Comprehensive Profile (which tests 46 analytes for subjective symptoms such as depression, weight issues and chemical sensitivities) (Genova, 2021c), the

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NutrEval FMV (which tests 118 analytes for symptoms such as fatigue, weight issues, and sports fitness optimization) (Genova, 2021a) and the Allergix IgG4 Food Antibodies (which tests 90 foods for sensitivity). Genova Diagnostics also offers the GI Effects Profile (advanced stool tests for the management of GI health), a full line of allergy testing and assessment tests (measuring IgG and IgE food antibodies, inhalants, molds and spices), the Ion Profile (which evaluates various types of organic, amino and fatty acids as well as nutrient and toxic elements), the CDSA 2.0 Profile with Parasitology (evaluates the microbiome, digestion and absorption), and SIBO Profile tests (breath tests which measure methane gases and exhaled hydrogen) (Genova, 2020).

An evaluation of symptoms of IEI patients includes a history, physical examination, and laboratory tests (complete blood count, serum electrolytes and glucose, urine analysis) with further testing guided by reported symptoms. An occupational or environmental history is also useful as patients typically report problems from chemical exposure (D. Black & Temple, 2019). A questionnaire such as the "Environmental Exposure and Sensitivity Intolerance" (EESI) may be used for an initial screening (Rossi & Pitidis, 2018). A psychiatric history is also recommended as psychiatric disorders are often co-morbid with IEI. A screening questionnaire such as the Patient Health Questionnaire (PHQ-9) can be used to identify psychiatric conditions in an IEI patient (D. Black & Temple, 2019; Gilbody, Richards, Brealey, & Hewitt, 2007).

Micronutrients are the essential vitamins and minerals required by the body for proper functioning. Panels have been developed which evaluate intracellular levels of essential vitamins and minerals. These panels may also be used on IEI patients. This may help to identify nutritional deficiencies in otherwise healthy patients or in patients suffering from some type of disease. SpectraCell Laboratories have developed the Micronutrient Test Panel, which is able to measure 31 vitamins, minerals, metabolites, amino acids, fatty acids and antioxidants; this test also measures how these micronutrients affect cellular functioning in an individual (SpectaCell, 2021). SpectraCell Laboratories have also developed the SPECTROX™, claiming it measures total antioxidant function in an individual, reporting on the repair mechanisms and net ability of each individual's cells (SpectraCell, 2008). As noted above, Genova Diagnostics has developed the NutrEval FMV that measures 118 markers, including amino acids, fatty acids and organic acids (Genova, 2021a). ONE (Optimal Nutritional Evaluation) FMV, also by Genova Diagnostics, is a urine-based nutritional test which assesses "the functional need for antioxidants, B-vitamins, minerals, digestive support and amino acids" (Genova, 2021b). The company notes that the ONE FMV test may be used for patients with mood disorders, fatigue, digestive issues, weight problems, general health, dietary guidance and fitness. Another nutrient panel blood test, developed by Life Extension, measures vitamin B12, folate, vitamin D 25-hydroxy, vitamin A, vitamin C, selenium, zinc, coQ10 and magnesium (LifeExtension, 2020). Finally, Vibrant America provides a test which measures approximately 40 intracellular and extracellular vitamins, minerals, fatty acids, amino acids and antioxidants (Vibrant, 2017).

Very little information suggests that the intracellular micronutrient analysis assists with positive health outcomes. Houston (2013) published an article on the role of vitamins, minerals and overall nutrition in the prevention and treatment of hypertension. This article reviewed hypertension-related clinical trials that include information on the "efficacy of nutrition, weight loss, exercise, and nutritional supplements, vitamins, minerals, and antioxidants" (Houston, 2013). Approximately 3338 patients were treated with micronutrient testing over a five-year period, with 20% of these patients exhibiting abnormally high blood pressure. After six months, 62% of the hypertensive patients reached lower blood pressure goals. Hence, the author states that the diagnosis and treatment of various nutritional deficiencies can decrease the number of cardiac events as well as reduce blood pressure and improve vascular biology. However, data for the control group not treated with micronutrients was not provided for comparison.

Another technique that has been used to assess nutritional status is the measurement of the hepatic proteins prealbumin and albumin. However, it seems that a physical examination has evolved as the main technique to diagnose malnutrition in a clinical setting. "The current consensus is that laboratory markers are not reliable by themselves but could be used as a complement to a thorough physical examination" in a malnutrition diagnosis (Bharadwaj et al., 2016). The Academy of Nutrition and

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Dietetics also do not accept albumin and prealbumin as a diagnostic tool for malnutrition and state that "There is no laboratory test that is both sensitive to and specific for protein-calorie malnutrition" (AND, 2017).

IEI patients may also report bowel irritability. Small intestinal bacterial overgrowth (SIBO) occurs when excessive aerobic and anaerobic bacteria colonize the small intestine; these bacteria are not typically found in the colon and can cause chronic diarrhea and malabsorption (Pimentel, 2019). SIBO may be diagnosed by a breath test. However, a validated gold standard method for diagnosing SIBO has not been indicated (Rezaie et al., 2017). The SIBO breath test uses carbohydrates in a simple, non-invasive and widely available testing method. A carbohydrate substrate (such as lactulose or glucose) is administered to the patient, which leads to the production of an analyte such as hydrogen or methane. "In individuals without SIBO, the administration of lactulose results in a single peak in breath hydrogen/methane within two to three hours due to the metabolism of lactulose by colonic flora. In patients with SIBO, administration of lactulose results in an early peak in breath hydrogen/methane levels due to metabolism by small bowel bacteria" (Pimentel, 2019). As noted above, Genova Diagnostics has developed the SIBO Profile test which is a two or three hour breath test that measures methane gases and exhaled hydrogen (Genova, 2020). This test requires the patient to ingest a lactulose solution.

Bratten, Spanier, and Jones (2008) completed a study with 224 patients with irritable bowel syndrome (IBS) and 40 controls. A lactulose breath test (LBT) was used to measure methane and hydrogen production to identify patients with IBS. Results showed that "The majority of patients with IBS and healthy subjects meet criteria for an "abnormal" LBT using previously published test criteria, and groups are not discriminated using this diagnostic method" (Bratten et al., 2008). The authors then questioned the utility of an LBT to diagnose IBS as the testing did not discriminate between IBS patients and healthy controls. A more recent study by Ghoshal, Srivastava, Ghoshal, and Misra (2014) evaluated 80 patients with IBS for SIBO. Culture had previously diagnosed 15/80 patients with SIBO. Both lactulose and glucose hydrogen breath tests (LHBT and GHBT, respectively) were used to measure SIBO. The authors conclude that "The specificity of GHBT was 100%, but the sensitivity of this test and the diagnostic performances of LHBT and breath methane were all very poor" (Ghoshal et al., 2014).

Guidelines and Recommendations

Due to the dubious nature of this condition, several prominent medical studies have regarded this condition with suspicion. In 1992, the American Medical Association stated that multiple chemical sensitivity (now IEI) should not be recognized as a syndrome until accurate, reproducible, and well-controlled studies can be done (AMA, 1992). Other societies such as the American College of Physicians and the American Academy of Allergy and Immunology hold similar views (AAAAI, 1986; ACP, 1989).

American Academy of Allergy, Asthma and Immunology (AAAAI) (Bush, Portnoy, Saxon, Terr, & Wood, 2006)

In 2006, AAAAI referenced IEI in their position statement on the medical effects of mold stating that testing many nonvalidated immune based tests, as had been done to suggest an immunologic basis for IEI (MCS), is expensive, not useful or valid, and should be discouraged (Bush et al., 2006).

American College of Occupational and Environmental Medicine (ACOEM) (ACOEM, 1999)

In 1999, the ACOEM published a position statement that stated there have been no consistent physical findings or laboratory abnormalities in IEI (then called MCS) patients and recommended that a generalized clinical approach, such as establishing a therapeutic alliance and avoiding unnecessary tests, would be useful in the management of other nonspecific medical syndromes (ACOEM, 1999).

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French Agency for Food, Environmental and Occupational Health & Safety (ANSES) Appraisal-Collective Expertise Report (ANSES, 2018)

An ANSES expert committee published an opinion piece regarding the expert appraisal on electromagnetic hypersensitivity or IEI due to electromagnetic fields. This committee did not find any conclusive results regarding IEI and therefore does not recommend any specific testing methods for this ailment, other than the psychological testing of patients.

Consensus Document (1999) ("Multiple chemical sensitivity: a 1999 consensus," 1999)

An international document, created by 89 clinicians and researchers with broad experience in the field, aimed to establish consensus criteria for MCS. The recognition criteria of MCS set forth by this expert panel are as follows:

- Chronic condition
- Reproducible symptoms with repeated chemical exposure
- Low exposure levels cause syndrome to occur
- Removal of offending agents cause symptoms to subside
- There are responses to chemically unrelated substances ("Multiple chemical sensitivity: a 1999 consensus," 1999)

The 19999 Consensus Document is the most widely used criteria for recognition of MCS (Martini, Iavicoli, & Corso, 2013).

North American Society for Pediatric Gastroenterology, Hepatology and Nutrition (NASPGHAN) and European Society for Pediatric Gastroenterology, Hepatology, and Nutrition (ESPGHAN) (Mouzaki et al., 2019)

The NASPGHAN and ESPGHAN have stated that “Clinicians should familiarize themselves with the limitations of nutritional biomarkers in the context of chronic liver disease” but do not give specific recommendations regarding nutritional laboratory testing (Mouzaki et al., 2019).

World Health Organization (WHO) (WHO, 2013)

The WHO published guidelines on the micronutrient intake in children with severe acute malnutrition. The guidelines recommend that the weight-for-height/weight-for-length status should be measured by clinicians to determine malnutrition. Micronutrient laboratory testing is not mentioned by the WHO.

The North American Expert Consensus Guidelines (Rezaie et al., 2017)

A team of experts have published guidelines on breath tests including their use for a SIBO diagnosis. The authors have provided the following recommendations:

- “Current small bowel culture techniques are not satisfactory for the assessment of SIBO.
- If culture is considered for diagnosis of SIBO, based on the current evidence, we suggest the threshold of $>10^3$ c.f.u./ml for the definition of SIBO.
- We suggest breath testing in the diagnosis of small intestinal bacterial overgrowth.
- Until a true gold standard is established, we suggest breath testing in assessing the presence of antibiotic responsive microbial colonization of the gastrointestinal tract.
- We suggest to evaluate for excessive methane excretion on breath test in association with clinical constipation and slowing of gastrointestinal transit.
- We suggest that breath testing should not be used for assessment of orocecal transit time.
- We suggest breath testing for the diagnosis of carbohydrate maldigestion syndromes.
- We suggest breath testing in the assessment of conditions with bloating
- We suggest that fructose and lactose breath test should be performed for at least 3 hours.

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- We suggest that the presence of bacterial overgrowth should be ruled out before performing lactose or fructose breath testing (Rezaie et al., 2017)."

It may be worth noting that the above recommendation of LHBT testing for SIBO was publicly criticized by Usai-Satta, Giannetti, Oppia, and Cabras (2018) due to high false positive rates and a low sensitivity. The authors state that "in our opinion, LHBT should be neither recommended nor suggested to detect SIBO in the clinical practice. Despite a low sensitivity, Glucose BT [breath test] remains the most accurate BT for non-invasive diagnosis of SIBO (Usai-Satta et al., 2018)."

The Academy of Nutrition and Dietetics (AND, 2017)

The Academy of Nutrition and Dietetics note that "serum proteins such as albumin and prealbumin are not included as defining characteristics of malnutrition because evidence analysis shows that serum levels of these proteins do not change in response to changes in nutrient intake. Hepatic proteins are not indicators of nutritional status, but are rather indicators of morbidity and mortality, and recovery from acute and chronic disease (AND, 2017)."

Applicable Federal Regulations

No specific U.S. Food and Drug Administration (FDA) approval or clearance of a test for idiopathic environmental intolerance was found. Additionally, many labs have developed specific tests that they must validate and perform in house. These laboratory-developed tests (LDTs) are regulated by the Centers for Medicare and Medicaid (CMS) as high-complexity tests under the Clinical Laboratory Improvement Amendments of 1988 (CLIA '88). As an LDT, the U. S. Food and Drug Administration has not approved or cleared this test; however, FDA clearance or approval is not currently required for clinical use.

Billing/Coding/Physician Documentation Information

This policy may apply to the following codes. Inclusion of a code in this section does not guarantee that it will be reimbursed. For further information on reimbursement guidelines, please see Administrative Policies on the Blue Cross Blue Shield of North Carolina web site at www.bcbsnc.com. They are listed in the Category Search on the Medical Policy search page.

Applicable service codes: 84134, 82127,82136, 82139, 82379, 82380, 82441, 82495, 82507, 82525, 82542, 82656, 82715, 82978, 83150, 83497, 83918, 83919, 83921, 84255, 84585, 84600, 84630, 84999, 86001, 86353, 88348, 83015, 83018, 82108, 82300, 83735, 83885, 83785, 82726, 89125, 82710, 84590, 84446, 83655, 91065

Reimbursement:

1. *For 83918 (Organic acids; total, quantitative, each specimen), a maximum of 2 units per date of service is **ALLOWED**.*

2. *For 83919 (Organic acids; qualitative, each specimen), a maximum of 1 unit per date of service is **ALLOWED**.*

3. *For 83921 (Organic acid, single, quantitative), a maximum of 2 units per date of service is **ALLOWED**.*

4. *For 82127 (Amino acids; single, qualitative, each specimen), a maximum of 1 unit per date of service is **ALLOWED**.*

5. *For 82136 (Amino acids, 2 to 5 amino acids, quantitative, each specimen), a maximum of 2 units per date of service is **ALLOWED.***

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6. *For 82139 (Amino acids, 6 or more amino acids, quantitative, each specimen), a maximum of 2 units per date of service is **ALLOWED**.*

7. *For 84585 (Vanillylmandelic acid (VMA), urine), a maximum of 1 unit per date of service is **ALLOWED**.*

8. *For 83150 (Homovanillic acid (HVA)), a maximum of 1 unit per date of service is **ALLOWED**.*

9. *For 83497 (Hydroxyindolacetic acid, 5-(HIAA)), a maximum of 1 unit per date of service is **ALLOWED**.*

10. *For 82656 (Elastase, pancreatic (EL-1), fecal, qualitative or semi-quantitative), a maximum of 1 unit per date of service is **ALLOWED**.*

BCBSNC may request medical records for determination of medical necessity. When medical records are requested, letters of support and/or explanation are often useful, but are not sufficient documentation unless all specific information needed to make a medical necessity determination is included.

Scientific Background and Reference Sources

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Policy Implementation/Update Information

1/1/2019	New policy developed. BCBSNC will not provide coverage for the diagnosis of idiopathic environmental intolerance because it is considered investigational. Medical Director review 1/1/2019. Policy noticed 1/1/2019 for effective date 4/1/2019. (jd)
6/11/2019	Reviewed by Avalon 1st Quarter 2019 CAB. Related Policies added to Description section. When Not Covered policy statement extensively revised as follows: revised item #2: a-y and added items #3-7. Policy guidelines updated to support revised policy statement. Billing/Coding

section revised with the addition of Reimbursement items 1-10 along with the following codes: 82127, 82139, 82380, 82441, 82507, 82542, 82656, 82715, 83150, 83497, 83918, 83919, 83921, 84585, 84600, 86001, 83015, 83018, 82108, 82300, 83735, 83885, 83785, 82726, 89125, 82710, 84590, 84446, and 83655. References updated. Policy noticed 6/11/19 with effective date of 8/13/19. Medical Director review 5/2019. (jd)

10/29/19 Wording in the Policy, When Covered, and/or Not Covered section(s) changed from Medical Necessity to Reimbursement language, where needed. (gm)

2/25/20 Specialty Matched Consultant Advisory Panel review 11/2019. Medical Director review 11/2019. (jd)

5/12/20 Reviewed by Avalon 1st Quarter 2020 CAB. The following updates were made to the When Not Covered section: Added "organophosphates" to item #2; added items k and l to #6; added #7 along with items a-c. Policy guidelines and references updated. The following CPT codes were added to the Billing/Coding section: 84134, 91065. Medical Director review 4/2020. (jd)

12/8/20 Specialty Matched Consultant Advisory Panel review 11/2020. Medical Director review11/2020.

5/4/21 Reviewed by Avalon 1st Quarter 2021 CAB. References updated. Medical Director review 4/2021. (jd)

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