

General Filters

Date

May 27, 2025 (Updated for NEMSIS v3.5.1)

August 31, 2021

February 1, 2022 (Added missing values for air transport in v3.5 “Transport” filter)

June 27, 2023 (Added filters for Response Mode and Transport Mode: emergent and non-emergent)

Introduction

In addition to the basic criteria for each NEMSIS case definition, it is common to add criteria that further filter the record selection for specific performance improvement or research needs. This document provides code for commonly used filters.

In some cases, the general filters are different in NEMSIS versions 3.4 and 3.5.

- Filters labeled “v3.4” are only compatible with NEMSIS version 3.4.
- Filters labeled “v3.5” are only compatible with NEMSIS version 3.5.
- Filters labeled “v3.4 and v3.5” are compatible with NEMSIS versions 3.4 and 3.5 and can be used to query datasets that contain a mix of both versions.

In XPath code, the context element is `/EMSDataset/Header/PatientCareReport`.

In SAS code, the statements are within the `proc sql` procedure.

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Type of Service Requested

Emergency Response (Primary Response Area)

v3.4 and v3.5:

<i>XPath</i>	eResponse/eResponse.ServiceGroup/eResponse5 = '2205001'
<i>SAS</i>	select * from nemsis.pub_pcrEvents where eDisposition_05 = '2205001';

Interfacility Transfer, Medical Transport

v3.5:

<i>XPath</i>	eResponse/eResponse.ServiceGroup/eResponse5 = ('2205005', '2205007', '2205015', '2205017', '2205019')
<i>SAS</i>	select * from nemsis.pub_pcrEvents where eResponse_05 in ('2205005', '2205007', '2205015', '2205017', '2205019');

v3.4:

<i>XPath</i>	eResponse/eResponse.ServiceGroup/eResponse5 = ('2205005', '2205007')
<i>SAS</i>	select * from nemsis.pub_pcrEvents where eResponse_05 in ('2205005', '2205007');

v3.4 and v3.5:

<i>XPath</i>	eResponse/eResponse.ServiceGroup/eResponse5 = ('2205005', '2205007', '2205015', '2205017', '2205019')
<i>SAS</i>	select * from nemsis.pub_pcrEvents where eResponse_05 in ('2205005', '2205007', '2205015', '2205017', '2205019');

Unit Transport and Equipment Capability (v3.5)

Primary Role of the Unit (v3.4)

Level of Care of This Unit (v3.4)

Transport

v3.5:

XPath eResponse/eResponse.07 = ('2207011', '2207013', '2207015', '2207017', '2207019', '2207025')

SAS select * from nemsis.pub_pcrEvents where eResponse_07 in ('2207011', '2207013', '2207015', '2207017', '2207019', '2207025');

v3.4:

XPath eResponse/eResponse.07 = ('2207003', '2207011', '2207013')

SAS select * from nemsis.pub_pcrEvents where eResponse_07 in ('2207003', '2207011', '2207013');

v3.4 and v3.5:

XPath eResponse/eResponse.07 = ('2207003', '2207011', '2207013', '2207015', '2207017', '2207019', '2207025')

SAS select * from nemsis.pub_pcrEvents where eResponse_07 in ('2207003', '2207011', '2207013', '2207015', '2207017', '2207019', '2207025');

Non-transport

v3.5:

XPath eResponse/eResponse.07 = ('2207021', '2207023', '2207027')

SAS select * from nemsis.pub_pcrEvents where eResponse_07 in ('2207021', '2207023', '2207027');

v3.4:

XPath eResponse/eResponse.07 = ('2207005', '2207007', '2207009')

SAS select * from nemsis.pub_pcrEvents where eResponse_07 in ('2207005', '2207007', '2207009');

v3.4 and v3.5:

XPath eResponse/eResponse.07 = ('2207005', '2207007', '2207009', '2207021',
'2207023', '2207027')

SAS select * from nemsis.pub_pcrEvents where eResponse_07 in ('2207005',
'2207007', '2207009', '2207021', '2207023', '2207027');

Ground

v3.5:

XPath eResponse/eResponse.07 = ('2207015', '2207017', '2207019', '2207021',
'2207023', '2207025', '2207027')

SAS select * from nemsis.pub_pcrEvents where eResponse_07 in ('2207015',
'2207017', '2207019', '2207021', '2207023', '2207025', '2207027');

v3.4:

XPath eResponse/eResponse.07 = ('2207003', '2207005', '2207007', '2207009')

SAS select * from nemsis.pub_pcrEvents where eResponse_07 in
('2207003', '2207005', '2207007', '2207009');

v3.4 and v3.5:

XPath eResponse/eResponse.07 = ('2207003', '2207005', '2207007', '2207009',
'2207015', '2207017', '2207019', '2207021', '2207023', '2207025',
'2207027')

SAS select * from nemsis.pub_pcrEvents where eResponse_07 in ('2207003',
'2207005', '2207007', '2207009', '2207015', '2207017', '2207019',
'2207021', '2207023', '2207025', '2207027');

Air

v3.4 and v3.5:

XPath eResponse/eResponse.07 = ('2207011', '2207013')

SAS select * from nemsis.pub_pcrEvents where eResponse_07 in
('2207011', '2207013');

BLS

v3.5:

XPath eResponse/eResponse.07 = ('2207017', '2207023')

SAS select * from nemsis.pub_pcrEvents where eResponse_07 in ('2207017', '2207023');

v3.4:

XPath eResponse/eResponse.15 = ('2215001', '2215003', '2215005', '2215007', '22150023')

SAS select * from nemsis.pub_pcrEvents where eResponse_15 in ('2215001', '2215003', '2215005', '2215007', '22150023');

v3.4 and v3.5:

XPath eResponse/eResponse.07 = ('2207017', '2207023')
or
eResponse/eResponse.15 = ('2215001', '2215003', '2215005', '2215007', '22150023')

SAS select * from nemsis.pub_pcrEvents where
eResponse_07 in ('2207017', '2207023')
or
eResponse_15 in ('2215001', '2215003', '2215005', '2215007', '22150023');

ALS

v3.5:

XPath eResponse/eResponse.07 = ('2207011', '2207013', '2207015', '2207019', '2207021')

SAS select * from nemsis.pub_pcrEvents where eResponse_07 in ('2207011', '2207013', '2207015', '2207019', '2207021');

v3.4:

XPath eResponse/eResponse.15 = ('2215009', '2215011', '2215013', '2215015', '2215017', '22150019', '22150021')

SAS select * from nemsis.pub_pcrEvents where eResponse_15 in ('2215009', '2215011', '2215013', '2215015', '2215017', '22150019', '22150021');

v3.4 and v3.5:

XPath eResponse/eResponse.07 = ('2207011', '2207013', '2207015' , '2207019',
'2207021')
or
eResponse/eResponse.15 = ('2215009', '2215011', '2215013', '2215015',
'2215017', '22150019', '22150021')

SAS select * from nemsis.pub_pcrEvents where
eResponse_07 in ('2207011', '2207013', '2207015', '2207019',
'2207021')
or
eResponse_15 in ('2215009', '2215011', '2215013', '2215015',
'2215017', '22150019', '22150021');

Other

v3.5:

XPath eResponse/eResponse.07 = ('2207025', '2207027')

SAS select * from nemsis.pub_pcrEvents where eResponse_07 in
('2207025', '2207027');

Response Mode to Scene

Emergent

v3.4 and v3.5:

<i>XPath</i>	<code>eResponse/eResponse.23 = ('2223001', '2223007')</code>
<i>SAS</i>	<code>select * from nemsis.pub_pcrEvents where eResponse_23 in ('2223001', '2223007');</code>

Non-emergent

v3.4 and v3.5:

<i>XPath</i>	<code>eResponse/eResponse.23 = ('2223003', '2223005')</code>
<i>SAS</i>	<code>select * from nemsis.pub_pcrEvents where eResponse_23 in ('2223003', '2223005');</code>

Initial Patient Acuity

Critical (Red)

v3.4 and v3.5:

XPath eSituation/eSituation.13 = '2813001'

SAS select * from nemsis.pub_pcrEvents where eSituation_13 = '2813001';

Emergent (Yellow)

v3.4 and v3.5:

XPath eSituation/eSituation.13 = '2813003'

SAS select * from nemsis.pub_pcrEvents where eSituation_13 = '2813003';

Emergent (Yellow) or Critical (Red)

v3.4 and v3.5:

XPath eSituation/eSituation.13 = ('2813001', '2813003')

SAS select * from nemsis.pub_pcrEvents where eSituation_13 in
('2813003', '2813001');

Lower Acuity (Green)

v3.4 and v3.5:

XPath eSituation/eSituation.13 = '2813005'

SAS select * from nemsis.pub_pcrEvents where eSituation_13 = '2813005';

Dead without Resuscitation Efforts (Black)

v3.4 and v3.5:

XPath eSituation/eSituation.13 = '2813007'

SAS select * from nemsis.pub_pcrEvents where eSituation_13 = '2813007';

Non-Acute/Routine

v3.5:

XPath eSituation/eSituation.13 = '2813009'

SAS select * from nemsis.pub_pcrEvents where eSituation_13 = '2813009';

Alive

v3.5:

XPath eSituation/eSituation.13 =
('2813001', '2813003', '2813005', '2813009')

SAS select * from nemsis.pub_pcrEvents where eSituation_13 in
('2813001', '2813003', '2813005', '2813009');

v3.4:

XPath eSituation/eSituation.13 = ('2813001', '2813003', '2813005')

SAS select * from nemsis.pub_pcrEvents where eSituation_13 in
('2813001', '2813003', '2813005');

v3.4 and v3.5:

XPath eSituation/eSituation.13 =
('2813001', '2813003', '2813005', '2813009')

SAS select * from nemsis.pub_pcrEvents where eSituation_13 in
('2813001', '2813003', '2813005', '2813009');

Patient Age

Pediatric (less than 18 years old)

v3.4 and v3.5:

```
XPath      ePatient/ePatient.AgeGroup[ePatient.15 != '' and
            (
              (ePatient.15 < 18 and ePatient.16 = '2516009')
              or
              ePatient.16 = ('2516001', '2516003', '2516005', '2516007')
            )
          ]

SAS          select * from nemsis.computedElements where ageInYear lt 18;
```

Adult (18 years or older)

v3.4 and v3.5:

```
XPath      ePatient/ePatient.AgeGroup[ePatient.15 != '' and ePatient.15 >= 18 and
            ePatient.16 = '2516009']

SAS          select * from nemsis.computedElements where ageInYear ge 18;
```

Geriatric (65 years or older)

v3.4 and v3.5:

```
XPath      ePatient/ePatient.AgeGroup[ePatient.15 != '' and ePatient.15 >= 65 and
            ePatient.16 = '2516009']

SAS          select * from nemsis.computedElements where ageInYear ge 65;
```

Incident/Patient Disposition

Patient

v3.5:

XPath eDisposition/eDisposition.IncidentDispositionGroup/eDisposition.27 =
'4227001'

SAS select * from nemsis.pub_pcrEvents where eDisposition_27 = '4227001';

v3.4:

XPath eDisposition/eDisposition.12 = ('4212013', '4212015', '4212017',
'4212019', '4212021', '4212023', '4212025', '4212027', '4212029',
'4212031', '4212033', '4212035', '4212037')

SAS select * from nemsis.pub_pcrEvents where eDisposition_12 in
('4212013', '4212015', '4212017', '4212019', '4212021', '4212023',
'4212025', '4212027', '4212029', '4212031', '4212033', '4212035',
'4212037');

v3.4 and v3.5:

XPath eDisposition/eDisposition.IncidentDispositionGroup/eDisposition.27 =
'4227001'
or
eDisposition/eDisposition.12 = ('4212013', '4212015', '4212017',
'4212019', '4212021', '4212023', '4212025', '4212027', '4212029',
'4212031', '4212033', '4212035', '4212037')

SAS select * from nemsis.pub_pcrEvents where
eDisposition_27 = '4227001'
or
eDisposition_12 in ('4212013', '4212015', '4212017', '4212019',
'4212021', '4212023', '4212025', '4212027', '4212029', '4212031',
'4212033', '4212035', '4212037');

Patient Treated

v3.5:

XPath eDisposition/eDisposition.IncidentDispositionGroup/eDisposition.28 =
'4228001'

SAS select * from nemsis.pub_pcrEvents where eDisposition_28 = '4228001';

v3.4:

```
XPath    eDisposition/eDisposition.12 = ('4212017', '4212019', '4212027',
                                     '4212029', '4212031', '4212033', '4212035', '4212037')

SAS       select * from nemsis.pub_pcrEvents where eDisposition_12 in
          ('4212017', '4212019', '4212027', '4212029', '4212031', '4212033',
          '4212035', '4212037');
```

v3.4 and v3.5:

```
XPath    eDisposition/eDisposition.IncidentDispositionGroup/eDisposition.28 =
          '4228001'
or
eDisposition/eDisposition.12 = ('4212017', '4212019', '4212027',
                                '4212029', '4212031', '4212033', '4212035', '4212037');

SAS       select * from nemsis.pub_pcrEvents where
          eDisposition_28 = '4228001'
or
          eDisposition_12 in ('4212017', '4212019', '4212027', '4212029',
                              '4212031', '4212033', '4212035', '4212037');
```

EMS Transport

v3.5:

```
XPath    eDisposition/eDisposition.IncidentDispositionGroup/eDisposition.30 =
          ('4230001', '4230003', '4230005', '4230007')

SAS       select * from nemsis.pub_pcrEvents where eDisposition_30 in
          ('4230001', '4230003', '4230005', '4230007');
```

v3.4:

```
XPath    eDisposition/eDisposition.12 =
          ('4212013', '4212017', '4212023', '4212033')

SAS       select * from nemsis.pub_pcrEvents where eDisposition_12 in
          ('4212013', '4212017', '4212023', '4212033');
```

v3.4 and v3.5:

<i>XPath</i>	eDisposition/eDisposition.IncidentDispositionGroup/eDisposition.30 = ('4230001', '4230003', '4230005', '4230007') or eDisposition/eDisposition.12 = ('4212013', '4212017', '4212023', '4212033')
<i>SAS</i>	select * from nemsis.pub_pcrEvents where eDisposition_30 in ('4230001', '4230003', '4230005', '4230007') or eDisposition_12 in ('4212013', '4212017', '4212023', '4212033');

EMS Transport by This Unit

v3.5:

<i>XPath</i>	eDisposition/eDisposition.IncidentDispositionGroup[eDisposition.28 = '4228001' and eDisposition.30 = ('4230001', '4230003')]
<i>SAS</i>	select * from nemsis.pub_pcrEvents where eDisposition_28 = '4228001' and eDisposition_30 in ('4230001', '4230003');

v3.4:

<i>XPath</i>	eDisposition/eDisposition.12 = '4212033'
<i>SAS</i>	select * from nemsis.pub_pcrEvents where eDisposition_12 = '4212033';

v3.4 and v3.5:

<i>XPath</i>	eDisposition/eDisposition.IncidentDispositionGroup[eDisposition.28 = '4228001' and eDisposition.30 = ('4230001', '4230003')] or eDisposition/eDisposition.12 = '4212033'
<i>SAS</i>	select * from nemsis.pub_pcrEvents where (eDisposition_28 = '4228001' and eDisposition_30 in ('4230001', '4230003')) or eDisposition_12 = '4212033';

Patient Transferred to Another EMS Unit

v3.5:

XPath eDisposition/eDisposition.IncidentDispositionGroup/eDisposition.29 =
 '4229003'

SAS select * from nemsis.pub_pcrEvents where eDisposition_29 = '4229003';

v3.4:

XPath eDisposition/eDisposition.12 = '4212031'

SAS select * from nemsis.pub_pcrEvents where eDisposition_12 = '4212031';

v3.4 and v3.5:

XPath eDisposition/eDisposition.IncidentDispositionGroup/eDisposition.29 =
 '4229003'
 or
 eDisposition/eDisposition.12 = '4212031'

SAS select * from nemsis.pub_pcrEvents where
 eDisposition_29 = '4229003'
 or
 eDisposition_12 = '4212031';

Transport Mode from Scene

Emergent

v3.4 and v3.5:

<i>XPath</i>	<code>eDisposition/eDisposition.17 = ('4217001', '4217007')</code>
<i>SAS</i>	<code>select * from nemsis.pub_pcrEvents where eDisposition_17 in ('4217001', '4217007');</code>

Non-emergent

v3.4 and v3.5:

<i>XPath</i>	<code>eDisposition/eDisposition.17 = ('4217003', '4217005')</code>
<i>SAS</i>	<code>select * from nemsis.pub_pcrEvents where eDisposition_17 in ('4217003', '4217005');</code>