

# General Filters

---

## Date

August 31, 2021

## Introduction

In addition to the basic criteria for each NEMESIS 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 NEMESIS versions 3.4.0 and 3.5.0.

- Filters labeled “v3.4.0” are only compatible with NEMESIS version 3.4.0.
- Filters labeled “v3.5.0” are only compatible with NEMESIS version 3.5.0.
- Filters labeled “v3.4.0 and v3.5.0” are compatible with NEMESIS versions 3.4.0 and 3.5.0 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.

## Contents

Type of Service Requested.....	3
Emergency Response (Primary Response Area) .....	3
Interfacility Transfer, Medical Transport .....	3
Unit Transport and Equipment Capability (v3.5.0)	
Primary Role of the Unit (v3.4.0)	
Level of Care of This Unit (v3.4.0) .....	4
Transport.....	4
Non-transport .....	4
Ground .....	5
Air.....	5
BLS.....	6
ALS.....	6
Other .....	7
Initial Patient Acuity.....	8
Critical (Red).....	8
Emergent (Yellow).....	8
Emergent (Yellow) or Critical (Red).....	8
Lower Acuity (Green) .....	8
Dead without Resuscitation Efforts (Black) .....	8
Non-Acute/Routine.....	9
Alive.....	9
Patient Age.....	10
Pediatric (less than 18 years old) .....	10
Adult (18 years or older).....	10
Geriatric (65 years or older).....	10
Incident/Patient Disposition .....	11
Patient.....	11
Patient Treated .....	11
EMS Transport.....	12
EMS Transport by This Unit.....	13
Patient Transferred to Another EMS Unit.....	14

## Type of Service Requested

### Emergency Response (Primary Response Area)

v3.4.0 and v3.5.0:

*XPath* eResponse/eResponse.ServiceGroup/eResponse.05 = '2205001'  
*SAS* select \* from nemsis.pub\_pcrEvents where eDisposition\_05 = '2205001';

### Interfacility Transfer, Medical Transport

v3.5.0:

*XPath* eResponse/eResponse.ServiceGroup/eResponse.05 =  
( '2205005', '2205007', '2205015', '2205017', '2205019' )  
*SAS* select \* from nemsis.pub\_pcrEvents where eResponse\_05 in  
( '2205005', '2205007', '2205015', '2205017', '2205019' );

v3.4.0:

*XPath* eResponse/eResponse.ServiceGroup/eResponse.05 = ( '2205005', '2205007' )  
*SAS* select \* from nemsis.pub\_pcrEvents where eResponse\_05 in  
( '2205005', '2205007' );

v3.4.0 and v3.5.0:

*XPath* eResponse/eResponse.ServiceGroup/eResponse.05 =  
( '2205005', '2205007', '2205015', '2205017', '2205019' )  
*SAS* select \* from nemsis.pub\_pcrEvents where eResponse\_05 in  
( '2205005', '2205007', '2205015', '2205017', '2205019' );

## Unit Transport and Equipment Capability (v3.5.0)

### Primary Role of the Unit (v3.4.0)

### Level of Care of This Unit (v3.4.0)

#### Transport

v3.5.0:

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

*SAS* select \* from nemsis.pub\_pcrEvents where eResponse\_07 in ('2207015', '2207017', '2207019', '2207025');

v3.4.0:

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

*SAS* select \* from nemsis.pub\_pcrEvents where eResponse\_07 in ('2207003', '2207011', '2207013');

v3.4.0 and v3.5.0:

*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

v3.5.0:

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

*SAS* select \* from nemsis.pub\_pcrEvents where eResponse\_07 in ('2207021', '2207023', '2207027');

v3.4.0:

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

*SAS* select \* from nemsis.pub\_pcrEvents where eResponse\_07 in ('2207005', '2207007', '2207009');

v3.4.0 and v3.5.0:

*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

v3.5.0:

*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');

v3.4.0:

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

*SAS* select \* from nemsis.pub\_pcrEvents where eResponse\_07 in  
( '2207003', '2207005', '2207007', '2207009');

v3.4.0 and v3.5.0:

*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

v3.4.0 and v3.5.0:

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

*SAS* select \* from nemsis.pub\_pcrEvents where eResponse\_07 in  
( '2207011', '2207013');

## BLS

v3.5.0:

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

*SAS* select \* from nemsis.pub\_pcrEvents where eResponse\_07 in ('2207017', '2207023');

v3.4.0:

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

*SAS* select \* from nemsis.pub\_pcrEvents where eResponse\_15 in ('2215001', '2215003', '2215005', '2215007', '22150023');

v3.4.0 and v3.5.0:

*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

v3.5.0:

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

*SAS* select \* from nemsis.pub\_pcrEvents where eResponse\_07 in ('2207011', '2207013', '2207015', '2207019', '2207021');

v3.4.0:

*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');

v3.4.0 and v3.5.0:

*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

v3.5.0:

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

*SAS* select \* from nemsis.pub\_pcrEvents where eResponse\_07 in  
( '2207025', '2207027');

## Initial Patient Acuity

### Critical (Red)

v3.4.0 and v3.5.0:

*XPath* eSituation/eSituation.13 = '2813001'

*SAS* select \* from nemsis.pub\_pcrEvents where eSituation\_13 = '2813001';

### Emergent (Yellow)

v3.4.0 and v3.5.0:

*XPath* eSituation/eSituation.13 = '2813003'

*SAS* select \* from nemsis.pub\_pcrEvents where eSituation\_13 = '2813003';

### Emergent (Yellow) or Critical (Red)

v3.4.0 and v3.5.0:

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

*SAS* select \* from nemsis.pub\_pcrEvents where eSituation\_13 in ('2813003', '2813001');

### Lower Acuity (Green)

v3.4.0 and v3.5.0:

*XPath* eSituation/eSituation.13 = '2813005'

*SAS* select \* from nemsis.pub\_pcrEvents where eSituation\_13 = '2813005';

### Dead without Resuscitation Efforts (Black)

v3.4.0 and v3.5.0:

*XPath* eSituation/eSituation.13 = '2813007'

*SAS* select \* from nemsis.pub\_pcrEvents where eSituation\_13 = '2813007';



## Non-Acute/Routine

v3.5.0:

*XPath* eSituation/eSituation.13 = '2813009'

*SAS* select \* from nemsis.pub\_pcrEvents where eSituation\_13 = '2813009';

## Alive

v3.5.0:

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

*SAS* select \* from nemsis.pub\_pcrEvents where eSituation\_13 in  
( '2813001', '2813003', '2813005', '2813009' );

v3.4.0:

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

*SAS* select \* from nemsis.pub\_pcrEvents where eSituation\_13 in  
( '2813001', '2813003', '2813005' );

v3.4.0 and v3.5.0:

*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)

v3.4.0 and v3.5.0:

```
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)

v3.4.0 and v3.5.0:

```
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)

v3.4.0 and v3.5.0:

```
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

v3.5.0:

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

*SAS* select \* from nemsis.pub\_pcrEvents where eDisposition\_27 = '4227001';

v3.4.0:

*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');

v3.4.0 and v3.5.0:

*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

v3.5.0:

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

*SAS* select \* from nemsis.pub\_pcrEvents where eDisposition\_28 = '4228001';

v3.4.0:

```
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');
```

v3.4.0 and v3.5.0:

```
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

v3.5.0:

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

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

v3.4.0:

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

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

v3.4.0 and v3.5.0:

```
XPath      eDisposition/eDisposition.IncidentDispositionGroup/eDisposition.30 =
              ('4230001', '4230003', '4230005', '4230007')
              or
              eDisposition/eDisposition.12 =
              ('4212013', '4212017', '4212023', '4212033')

SAS        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

v3.5.0:

```
XPath      eDisposition/eDisposition.IncidentDispositionGroup[
              eDisposition.28 = '4228001'
              and
              eDisposition.30 = ('4230001', '4230003')]

SAS        select * from nemsis.pub_pcrEvents where
              eDisposition_28 = '4228001'
              and
              eDisposition_30 in ('4230001', '4230003');
```

v3.4.0:

```
XPath      eDisposition/eDisposition.12 = '4212033'

SAS        select * from nemsis.pub_pcrEvents where eDisposition_12 = '4212033';
```

v3.4.0 and v3.5.0:

```
XPath      eDisposition/eDisposition.IncidentDispositionGroup[
              eDisposition.28 = '4228001'
              and
              eDisposition.30 = ('4230001', '4230003')]
              or
              eDisposition/eDisposition.12 = '4212033'

SAS        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

v3.5.0:

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

*SAS* select \* from nemsis.pub\_pcrEvents where eDisposition\_29 = '4229003';

v3.4.0:

*XPath* eDisposition/eDisposition.12 = '4212031'

*SAS* select \* from nemsis.pub\_pcrEvents where eDisposition\_12 = '4212031';

v3.4.0 and v3.5.0:

*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';