

```
',trigger:"hover
focus",title:"",delay:0,html:!1,container:!1,viewport:{selector:"body",padding:0},c.prototype
document.constructor&&!this.options.selector)throw new Error(`selector` option
must be specified when initializing "+this.type+" on the window.document
object!");for(var e=this.options.trigger.split(" "),f=e.length;f--;)var
g=e[f];if("click"==g)this.$element.on("click."+this.type,this.options.selector,a.proxy(this.toggle
if("manual"!=g){var
h="hover"==g?"mouseenter":"focusin",i="hover"==g?"mouseleave":"focusout";this.$element
c.DEFAULTS},c.prototype.getOptions=function(b){return
b=a.extend({},this.getDefaults(),this.$element.data(),b),b.delay&&"number"==typeof
b.delay&&(b.delay={show:b.delay,hide:b.delay}),b},c.prototype.getDelegateOptions=function
b={},c=this.getDefaults();return
this._options&&a.each(this._options,function(a,d){c[a]!=d&&(b[a]=d)}),b},c.prototype.enter
c=b instanceof this.constructor?b:a(b.currentTarget).data("bs."+this.type);return
c||(c=new
this.constructor(b.currentTarget,this.getDelegateOptions()),a(b.currentTarget).data("bs."+t
instanceof
a.Event&&(c.inState["focusin"]==b.type?"focus":"hover"]!=0),c.tip().hasClass("in")||"in"==c.h
a in
this.inState)if(this.inState[a])return!0;return!1},c.prototype.leave=function(b){var
c=b instanceof this.constructor?b:a(b.currentTarget).data("bs."+this.type);return
c||(c=new
this.constructor(b.currentTarget,this.getDelegateOptions()),a(b.currentTarget).data("bs."+t
instanceof
a.Event&&(c.inState["focusout"]==b.type?"focus":"hover"]!=1),c.isInStateTrue())?void
0:(clearTimeout(c.timeout),c.hoverState="out",c.options.delay&&c.options.delay.hide?void
b=a.Event("show.bs."+this.type);if(this.hasContent()&&this.enabled){this.$element.trigger(
d=a.contains(this.$element[0].ownerDocument.documentElement,this.$element[0]);if(b.isD
e=this,f=this.tip(),g=this.getUID(this.type);this.setContent(),f.attr("id",g),this.$element.attr("
describedby",g),this.options.animation&&f.addClass("fade");var
h="function"==typeof
this.options.placement?this.options.placement.call(this,f[0],this.$element[0]):this.options.p
k=this.getPosition(),l=f[0].offsetWidth,m=f[0].offsetHeight;if(j){var
```

n=h,o=this.getPosition(this.\$viewport);h="bottom"==h&&k.bottom+m>o.bottom?"top":"top"
mo.width?"left":"left"==h&&k.left-lg.top+g.height&&(e.top=g.top+g.height-i)}else{var j=b.left-f,k=b.left+f+c;j.g.right&&(e.left=g.left+g.width-k)}return
e},c.prototype.getTitle=function(){var a,b=this.\$element,c=this.options;return
a=b.attr("data-original-title")||("function"==typeof
c.title?c.title.call(b[0]):c.title)},c.prototype.getUID=function(a){do
a+=~~(1e6*Math.random());while(document.getElementById(a));return
a},c.prototype.tip=function(){if(!this.\$tip&&(this.\$tip=a(this.options.template),1!=this.\$tip.length))
new Error(this.type+" `template` option must consist of exactly 1 top-level
element!");return this.\$tip},c.prototype.arrow=function(){return
this.\$arrow=this.\$arrow||this.tip().find(".tooltip-
arrow")},c.prototype.enable=function(){this.enabled=!0},c.prototype.disable=function(){this
c=this;b&&(c=a(b.currentTarget).data("bs."+this.type),c||(c=new
this.constructor(b.currentTarget,this.getDelegateOptions()),a(b.currentTarget).data("bs."+t
a=this;clearTimeout(this.timeout),this.hide(function(){a.\$element.off("." +a.type).removeData()
d=a.fn.tooltip;a.fn.tooltip=b,a.fn.tooltip.Constructor=c,a.fn.tooltip.noConflict=function(){retu
a.fn.tooltip=d,this}})(jQuery),+function(a){"use strict";function b(b){return
this.each(function(){var d=a(this),e=d.data("bs.popover"),f="object"==typeof
b&&b;(e||!/destroy|hide/.test(b))&&(e||d.data("bs.popover"),e=new
c(this,f),"string"==typeof b&&e[b]())})}var
c=function(a,b){this.init("popover",a,b)};if(!a.fn.tooltip)throw new Error("Popover
requires
tooltip.js");c.VERSION="3.3.5",c.DEFAULTS=a.extend({},a.fn.tooltip.Constructor.DEFAULTS),
c.prototype=a.extend({},a.fn.tooltip.Constructor.prototype),c.prototype.constructor=c,c.p
c.DEFAULTS},c.prototype.setContent=function(){var
a=this.tip(),b=this.getTitle(),c=this.getContent();a.find(".popover-
title")[this.options.html?"html":"text"]的心理,a.find(".popover-
content").children().detach().end()[this.options.html?"string"==typeof
c?"html":"append":"text"]的心理,a.removeClass("fade top bottom left right
in"),a.find(".popover-title").html()||a.find(".popover-
title").hide()},c.prototype.hasContent=function(){return
this.getTitle()||this.getContent()},c.prototype.getContent=function(){var
a=this.\$element,b=this.options;return a.attr("data-content")||("function"==typeof
b.content?b.content.call(a[0]):b.content)},c.prototype.arrow=function(){return

```
this.$arrow=this.$arrow||this.tip().find(".arrow");var  
d=a.fn.popover;a.fn.popover=b,a.fn.popover.Constructor=c,a.fn.popover.noConflict=function()  
a.fn.popover=d,this}}(jQuery),+function(a){"use strict";function  
b(c,d){this.$body=a(document.body),this.$scrollElement=a(a(c).is(document.body)?windo  
.nav li >  
a",this.offsets=[],this.targets=[],this.activeTarget=null,this.scrollHeight=0,this.$scrollElement=c(c){return this.each(function(){var  
d=a(this),e=d.data("bs.scrollspy"),f="object"==typeof  
c&&c;e||d.data("bs.scrollspy",e=new b(this,f)),"string"==typeof  
c&&e[c]())}b.VERSION="3.3.5",b.DEFAULTS={offset:10},b.prototype.getScrollHeight=function()  
this.$scrollElement[0].scrollHeight||Math.max(this.$body[0].scrollHeight,document.documentElement.scrollHeight);  
b=this,c="offset",d=0;this.offsets=[],this.targets=[],this.scrollHeight=this.getScrollHeight(),a  
b=a(this),e=b.data("target")||b.attr("href"),f=/^#/.test(e)&&a(e);return  
f&&f.length&&f.is(":visible")&&[[f[c]().top+d,e]]||null}).sort(function(a,b){return a[0]-  
b[0]}).each(function(){b.offsets.push(this[0]),b.targets.push(this[1])}),b.prototype.process=function()  
a,b=this.$scrollElement.scrollTop()+this.options.offset,c=this.getScrollHeight(),d=this.options.offset  
this.$scrollElement.height(),e=this.offsets,f=this.targets,g=this.activeTarget;if(this.scrollHeight-g  
g!=(a=f.length-1))&&this.activate(a);if(g&&b=e[a]&&(void 0===e[a+1]||b  
.dropdown-menu > .active").removeClass("active").end().find('[data-  
toggle="tab"]').attr("aria-expanded",!1),b.addClass("active").find('[data-  
toggle="tab"]').attr("aria-  
expanded",!0),h?(b[0].offsetWidth,b.addClass("in")):b.removeClass("fade"),b.parent(".drop  
menu").length&&b.closest("li.dropdown").addClass("active").end().find('[data-  
toggle="tab"]').attr("aria-expanded",!0),e&&e()}var g=d.find(">  
.active"),h=e&&a.support.transition&&(g.length&&g.hasClass("fade"))||!!d.find(">  
.fade").length);g.length&&h?g.one("bsTransitionEnd",f).emulateTransitionEnd(c.TRANSITION_DURATION):  
d=a.fn.tab;a.fn.tab=b,a.fn.tab.Constructor=c,a.fn.tab.noConflict=function(){return  
a.fn.tab=d,this};var  
e=function(c){c.preventDefault(),b.call(a(this),"show")};a(document).on("click.bs.tab.data-api",'[data-toggle="tab"]',e).on("click.bs.tab.data-api",'[data-  
toggle="pill"]',e})(jQuery),+function(a){"use strict";function b(b){return  
this.each(function(){var d=a(this),e=d.data("bs.affix"),f="object"==typeof  
b&&b;e||d.data("bs.affix",e=new c(this,f)),"string"==typeof b&&e[b]())})var  
c=function(b,d){this.options=a.extend({},c.DEFAULTS,d),this.$target=a(this.options.target)
```

```
api",a.proxy(this.checkPosition,this)).on("click.bs.affix.data-
api",a.proxy(this.checkPositionWithEventLoop,this)),this.$element=a(b),this.affixed=null,th
affix-top affix-
bottom",c.DEFAULTS={offset:0,target>window},c.prototype.getState=function(a,b,c,d){var
e=this.$target.scrollTop(),f=this.$element.offset(),g=this.$target.height();if(null!=c&&"top"=
c>e?"top":!1;if("bottom"==this.affixed)return
null!=c?e+this.unpin<=f.top?!1:"bottom":a-d>=e+g?!1:"bottom";var
h=null==this.affixed,i=h?e:f.top,j=h?g:b;return
null!=c&&c>=e?"top":null!=d&&i+j>=a-
d?"bottom":!1},c.prototype.getPinnedOffset=function(){if(this.pinnedOffset) return
this.pinnedOffset;this.$element.removeClass(c.RESET).addClass("affix");var
a=this.$target.scrollTop(),b=this.$element.offset();return this.pinnedOffset=b.top-
a},c.prototype.checkPositionWithEventLoop=function(){setTimeout(a.proxy(this.checkPosi
b=this.$element.height(),d=this.options.offset,e=d.top,f=d.bottom,g=Math.max(a(document
d&&(f=e=d),"function"==typeof e&&(e=d.top(this.$element)),"function"==typeof
f&&(f=d.bottom(this.$element));var
h=this.getState(g,b,e,f);if(this.affixed!=h){null!=this.unpin&&this.$element.css("top","","");var
i="affix"+(h?-
"+h:""),j=a.Event(i+".bs.affix");if(this.$element.trigger(j),j.isDefaultPrevented())return;this.aff
b-f)});var
d=a.fn.affix;a.fn.affix=b,a.fn.affix.Constructor=c,a.fn.affix.noConflict=function(){return
a.fn.affix=d,this},a(window).on("load",function(){a('[data-
spy="affix"]').each(function(){var
c=a(this),d=c.data();d.offset=d.offset||{},null!=d.offsetBottom&&(d.offset.bottom=d.offsetBo
'); $(tabs[0]).before(tabContent); // build the tabset var activeTab = 0;
tabs.each(function(i) { // get the tab div var tab = $(tabs[i]); // get the id then
sanitize it for use with bootstrap tabs var id = tab.attr('id'); // see if this is marked
as the active tab if (tab.hasClass('active')) activeTab = i; // remove any table of
contents entries associated with // this ID (since we'll be removing the heading
element) $("div#" + tocID + " li a[href='#" + id + "]").parent().remove(); // sanitize
the id for use with bootstrap tabs id = id.replace(/[^V?&!#<>]/g, " ").replace(/\s/g,
'_'); tab.attr('id', id); // get the heading element within it, grab its text, then remove
it var heading = tab.find('h' + tabLevel + ':first'); var headingText = heading.html();
heading.remove(); // build and append the tab list item var a = $('' + headingText
```

```
+'); a.attr('href', '#' + id); a.attr('aria-controls', id); var li = $('
'); li.append(a); tabList.append(li); // set it's attributes tab.attr('role', 'tabpanel');
tab.addClass('tab-pane'); tab.addClass('tabbed-pane'); if (fade)
tab.addClass('fade'); // move it into the tab content div
tab.detach().appendTo(tabContent); }); // set active tab
$(tabList.children('li')[activeTab]).addClass('active'); var active =
$(tabContent.children('div.section')[activeTab]); active.addClass('active'); if (fade)
active.addClass('in'); if (tabset.hasClass("tabset-sticky"))
tabset.rmarkdownStickyTabs(); } // convert section divs with the .tabset class to
tabsets var tabsets = $("div.section.tabset"); tabsets.each(function(i) {
buildTabset($(tabsets[i])); });
};
```

Measles infection in Northern Ireland

Public Health Agency

01 July 2025

- [1 Summary](#)
- [2 Background](#)
- [3 Measles notifications, 2024-2025](#)
- [4 Discussion](#)
- [5 Methods](#)
- [6 Supplementary Table](#)

Updates to this report will be published monthly.

1 Summary

- From 1 January 2025 to 30 June, 27 clinically suspected measles cases have been notified to the Public Health Agency.
- Of those notified during 2025 to 30 June, three were laboratory confirmed and one was epidemiologically confirmed.

2 Background

Measles is a systemic viral infection caused by the measles virus. It is normally characterised by a fever, rash and respiratory illness. For more information about measles please visit [NI Direct | Measles](#).

A vaccine against measles, which also provides protection against mumps and rubella (MMR), is included in the Northern Ireland childhood vaccination schedule at one year of age and at three years and four months. A regional MMR ‘catch-up’ campaign was delivered in Northern Ireland between February and June 2024 for anyone aged from one to 25 years, who had not already had two doses of MMR. For more information please visit [NI Direct | MMR catch-up campaign](#), [NI Direct | MMR](#) and [NI PHA | MMR vaccine catch-up](#).

Public and clinician awareness of measles has changed over time, especially during February 2024, which may have contributed to changes in trends.

Details of case definitions and methods are at the end of this document. Data were correct at 30 June 2025.

3 Measles notifications, 2024-2025

The number of notified clinically suspected measles cases from the start of 2024 until the report date (30 June 2025) are shown (Table 3.1).

Table 3.1: Counts of measles notifications, 2024-2025.

	2024 (N=199)	2025 (N=27)
Case category		
Confirmed	22 (11.1%)	4 (14.8%)
Probable	25 (12.6%)	1 (3.7%)
Possible	152 (76.4%)	22 (81.5%)

Please note: in the table above data for 2025 is up to 30 June

3.1 Trends

Measles notifications in Northern Ireland increased during February 2024 before decreasing by the end of March 2024 (Figure 3.1). There were 22 confirmed measles cases reported in 2024 with the last confirmed case reported in September 2024. There has been three laboratory confirmed and one epidemiologically confirmed measles cases reported in 2025 to date. The supplementary table below shows counts of measles notifications recorded by month.

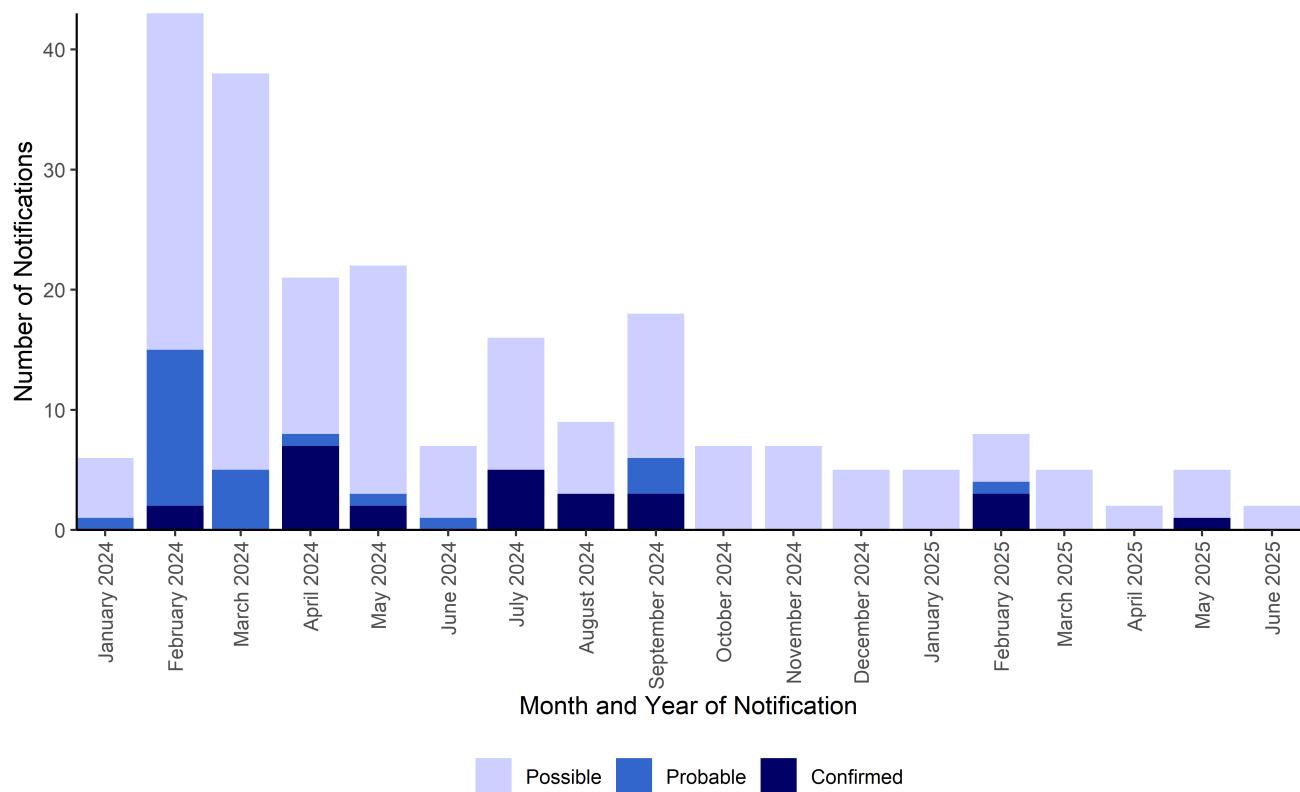


Figure 3.1: Incidence of measles notifications, by month and year of notification, all ages, 2024 - 2025.

4 Discussion

There has been three laboratory confirmed and one epidemiologically confirmed cases of measles reported during 2025 to 30 June 2025. There were 22 laboratory confirmed cases during 2024, the first since 2017. There was an increase in notifications of clinically suspected measles during February 2024, likely due to increased awareness and reporting. There is an increased risk of measles outbreaks due to a reduction in MMR vaccine

coverage in Northern Ireland during recent years [NI PHA | MMR vaccine coverage](#). Increasing coverage of the MMR vaccine is crucial to ensure widespread protection and prevent outbreaks of measles.

5 Methods

Measles notifications are reported by clinicians to the Public Health Agency and were extracted from the case management database. Measles is notifiable in Northern Ireland under the Public Health Act (1967) Northern Ireland.

Cases are presented by the date that they were recorded on the PHA database. Notified cases will be removed from future reports if PHA is notified that clinical investigations later result in an alternative diagnosis. Numbers may therefore reduce.

Data were processed in R.

5.1 Measles Case Definitions

Confirmed case: A case with laboratory confirmation of acute infection.

Probable case: A case with clinically classical symptoms of measles AND no previous MMR vaccinations or history of previous infection AND at least one of the following risk factors:

- Travel history in last 21 days.
- Attendance at large international mass gathering events.
- The case is a member of a community/population associated with low MMR vaccine uptake or measles outbreaks. Note this may only apply when there is transmission in Northern Ireland.

Possible case: A case with clinically classical symptoms of measles AND zero, one or two doses of MMR vaccine BUT no additional risk factors including those listed above.

The above case definitions are based on the current situation in Northern Ireland (as of 21 March 2024) and are subject to change.

6 Supplementary Table

Month of Report	Case category			
	Confirmed	Probable	Possible	Total
2025-01-01	0	0	5	5
2025-02-01	3	1	4	8
2025-03-01	0	0	5	5
2025-04-01	0	0	2	2
2025-05-01	1	0	4	5
2025-06-01	0	0	2	2
Total	4	1	22	27

[Print](#)