

## *Clostridium difficile* Infections (CDI) Update, Q1 2016/17

December 2016

### Summary Table

	Q1 2016/17	Previous quarter (Q4 2015/16*)	Same quarter of previous year (Q1 2015/16)
Total CDI cases identified	575	952	635
Number of new CDI cases associated with the reporting facility	284	465	338
Total inpatient days	611,326	973,558	647,350
<b>Rate of CDI associated with the reporting facility per 10,000 inpatient days (95% CI)</b>	<b>4.6 (4.1-5.2)</b>	<b>4.8 (4.4-5.2)</b>	<b>5.2 (4.7-5.8)</b>

\* There were more days in fiscal Q4 2015/16 (119 days) than in Q1 2016/17 (79 days) or Q1 2015/16 (79 days)

### Highlights

- The provincial rate of CDI associated with the reporting facility in Q1 of 2016/17 decreased slightly compared to the previous quarter (Q4 2015/16); however, the change was not statistically significant.
- The rate in Q1 2016/17 was also lower than the same quarter of the previous year (Q1 2015/16); this difference was also not statistically significant.
- The provincial rate has fluctuated in the past six quarters after a significant increase in Q4 2014/15.

The provincial CDI surveillance program was established to monitor the incidence and trends of healthcare-associated CDI among patients who have been hospitalized in acute care facilities.

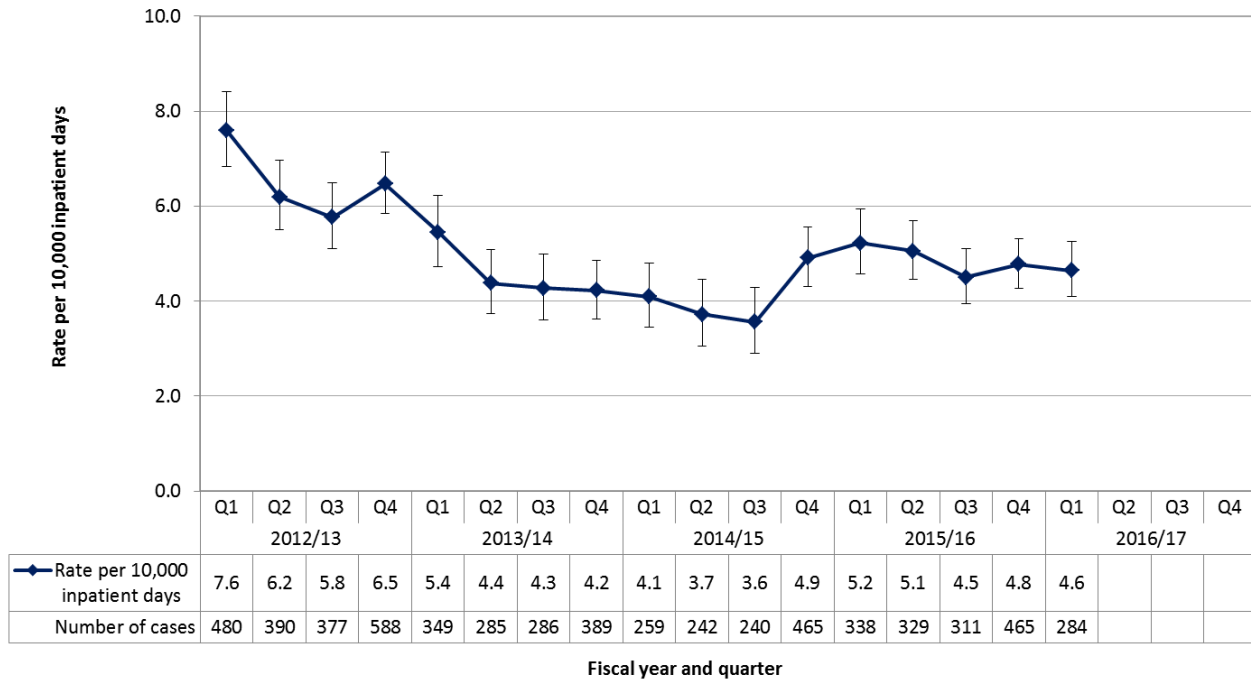
*Clostridium difficile* (*C. difficile*) are bacteria that can live in the bowel without causing harm. For healthy people, *C. difficile* does not often pose a health risk. However, for people taking antibiotics or with weakened immune systems, e.g. patients who are elderly or undergoing chemotherapy, the normal balance of healthy bacteria in the digestive system may be upset, allowing *C. difficile* to grow to unusually high levels and produce toxins that can damage the bowel and cause diarrhea, fever, abdominal cramping, dehydration, and even death.

*C. difficile* bacteria and their spores are shed in feces. People can acquire the bacteria if their hands have not been cleaned after touching surfaces (e.g., toilets, commodes, bathing tubs, and electronic rectal thermometers) contaminated with the feces of an infected person, and then touch their mouth.

Regular hand hygiene by healthcare providers and patients is the most effective way of preventing the transmission of *C. difficile* in the healthcare setting. Using antibiotics wisely and keeping the environment as clean as possible (especially around ill patients) can help reduce the risk of *C. difficile* spreading to other patients and/or visitors.

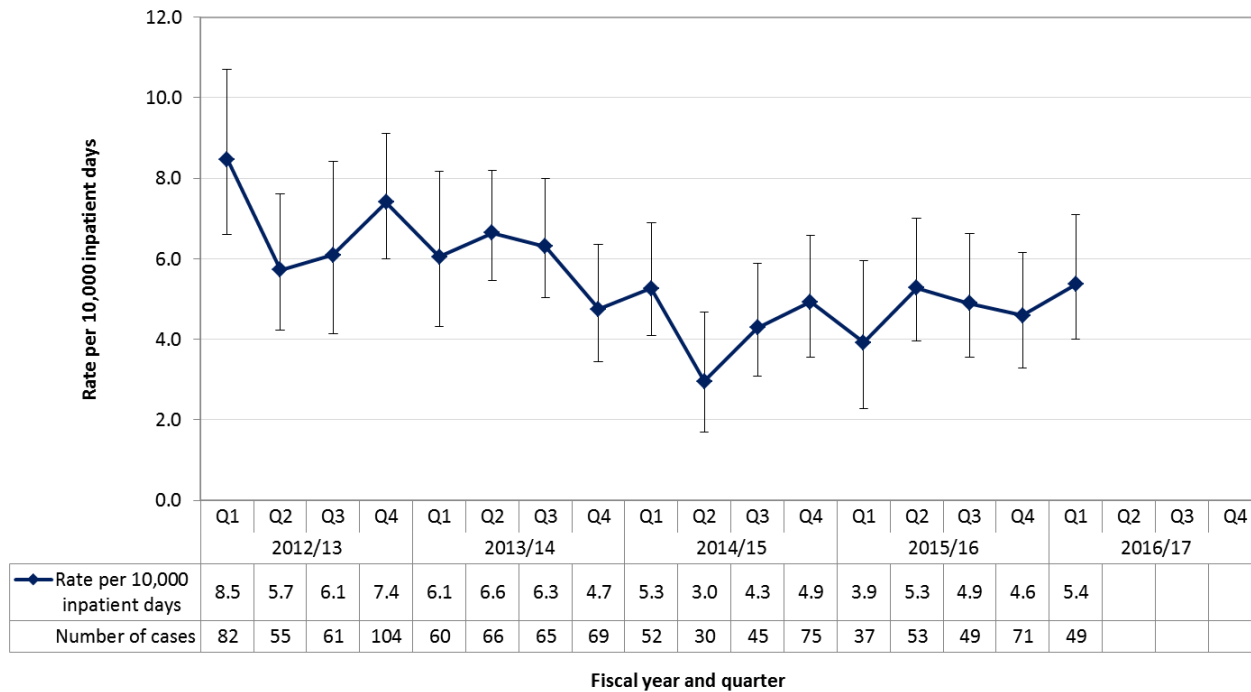
The PICNet website ([www.picnet.ca](http://www.picnet.ca)) has general information about CDI prevention and control, as well as the case definition, data sources, and limitations associated with this report. If you have questions or suspect that you have CDI, please contact your doctor or healthcare provider.

**Figure 1. Number of new cases and rate of CDI associated with the reporting facility, by fiscal year and quarter, British Columbia<sup>1</sup>**



Note: vertical bars on the line represent the 95% confidence interval of the rates

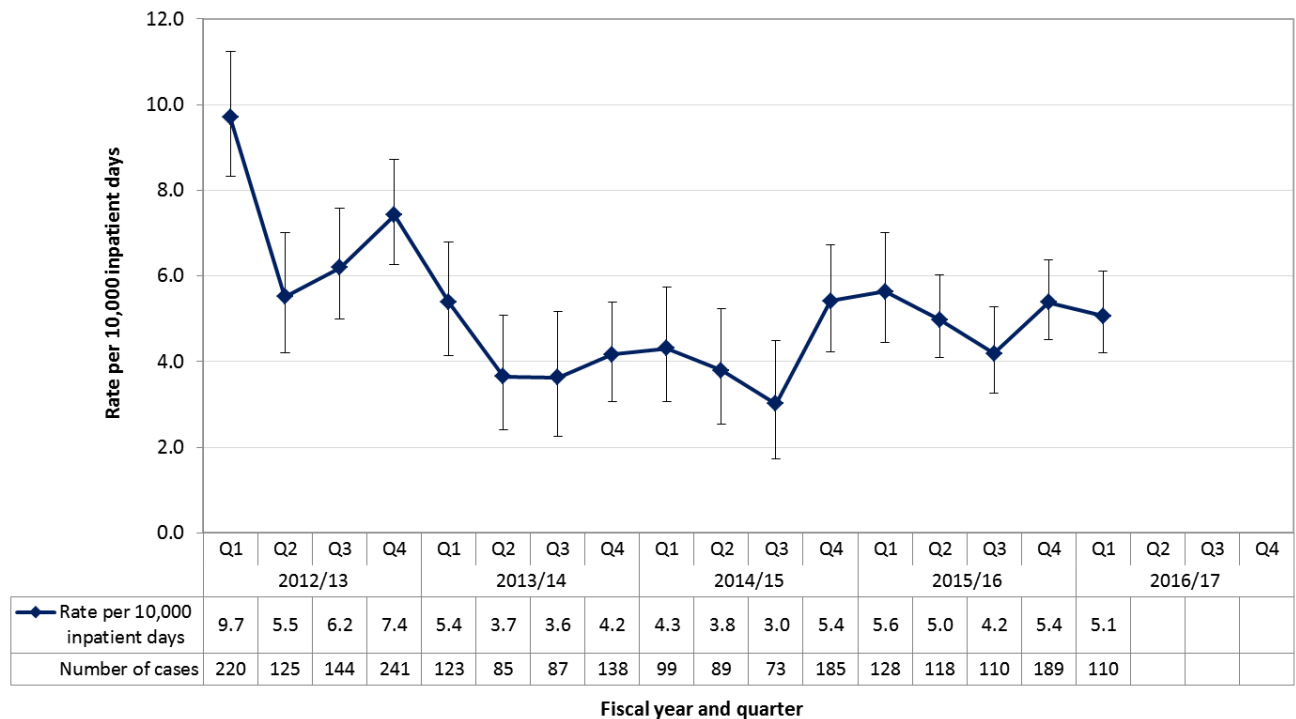
**Figure 2. Number of new cases and rate of CDI associated with the reporting facility, 2012/13 - 2016/17, Interior Health<sup>2</sup>**



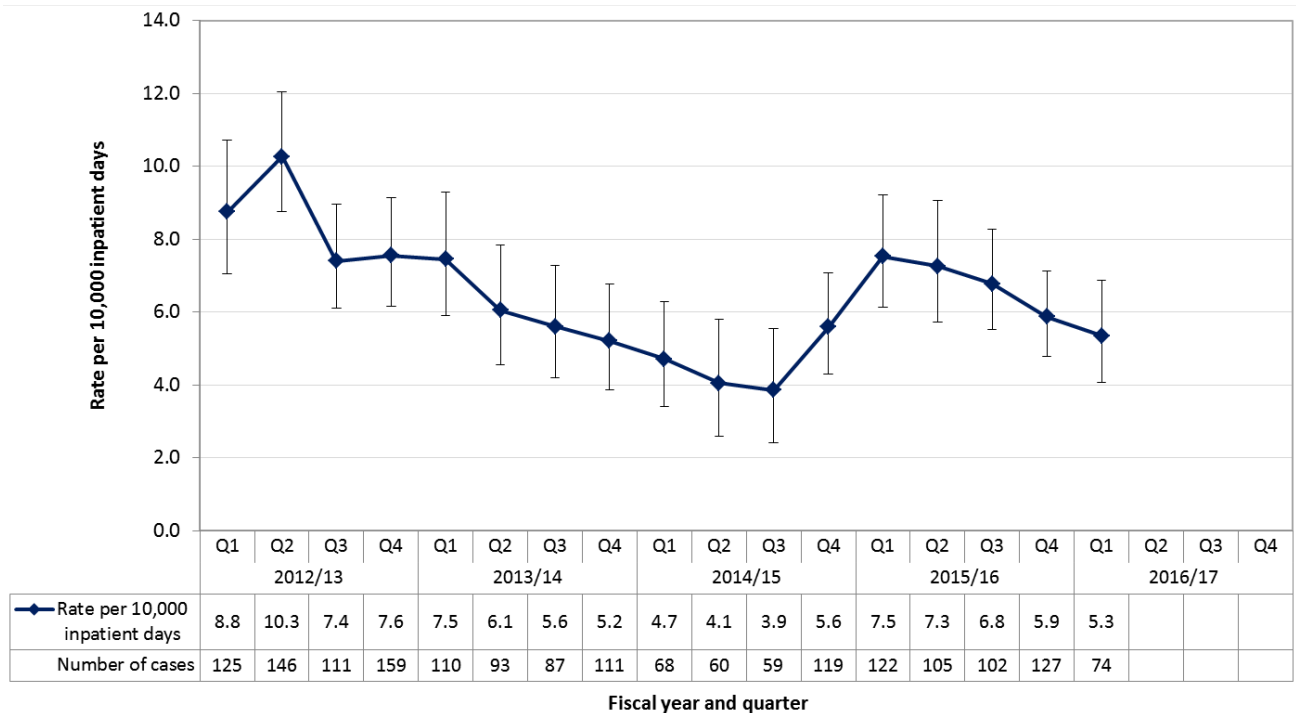
<sup>1</sup> Data were aggregated by fiscal quarter for each health authority except PHSA, which aggregated the data by calendar quarter. The time frame of each fiscal quarter varied by fiscal year and there were more days in Q4 than in Q1, Q2, and Q3 each fiscal year. Laboratory testing for confirmation of CDI diagnosis and application of case definition changed over time and varied by health authority.

<sup>2</sup> Excluded certain acute care facilities in Q1 and Q2 of FY 2012/2013

**Figure 3. Number of new cases and rate of CDI associated with the reporting facility, 2012/13 - 2016/17, Fraser Health**

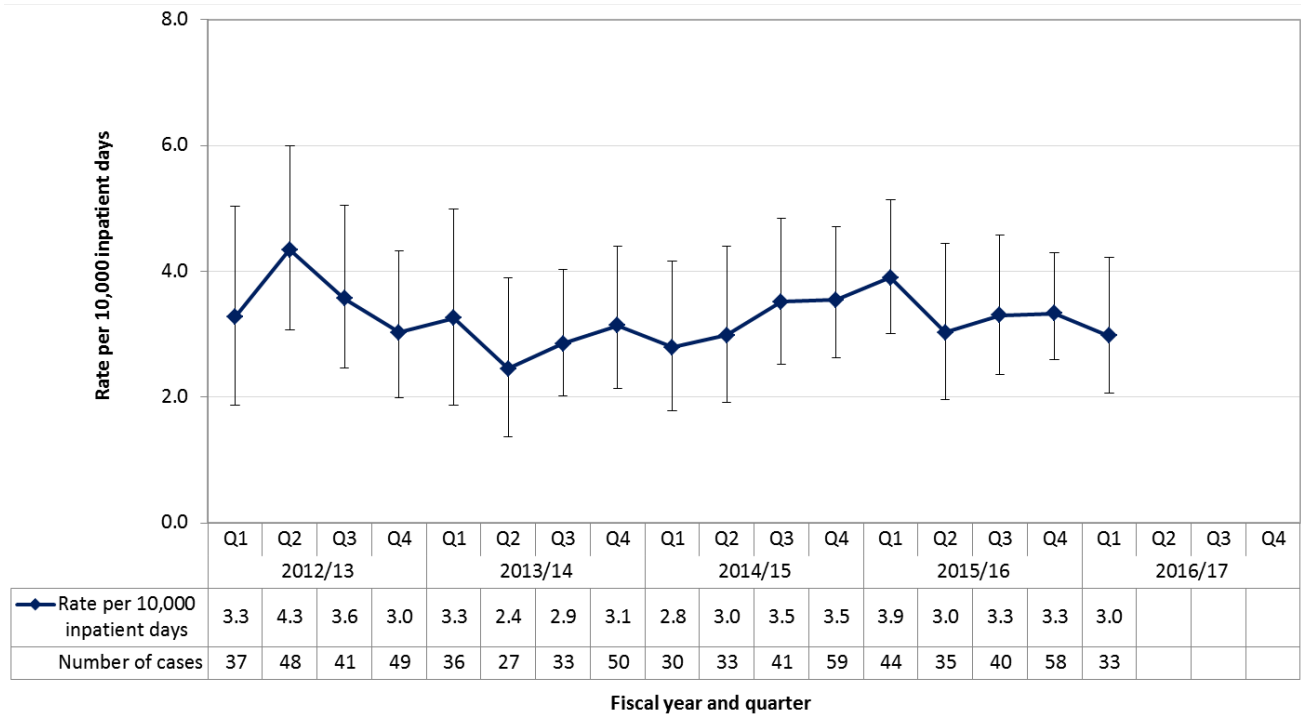


**Figure 4. Number of new cases and rate of CDI associated with the reporting facility, 2012/13 - 2016/17, Vancouver Coastal Health<sup>3</sup>**

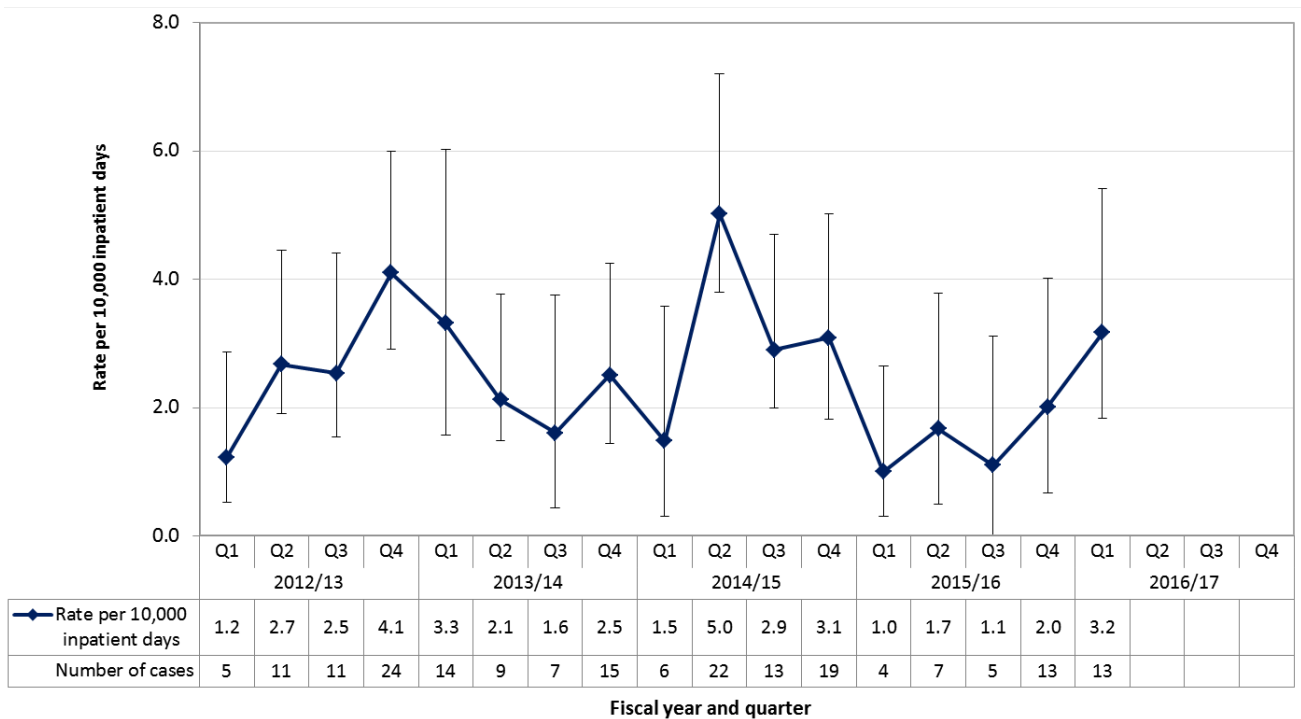


<sup>3</sup> Includes acute care facilities of Providence Health Care (PHC)

**Figure 5. Number of new cases and rate of CDI associated with the reporting facility, 2012/13 - 2016/17, Island Health<sup>4</sup>**

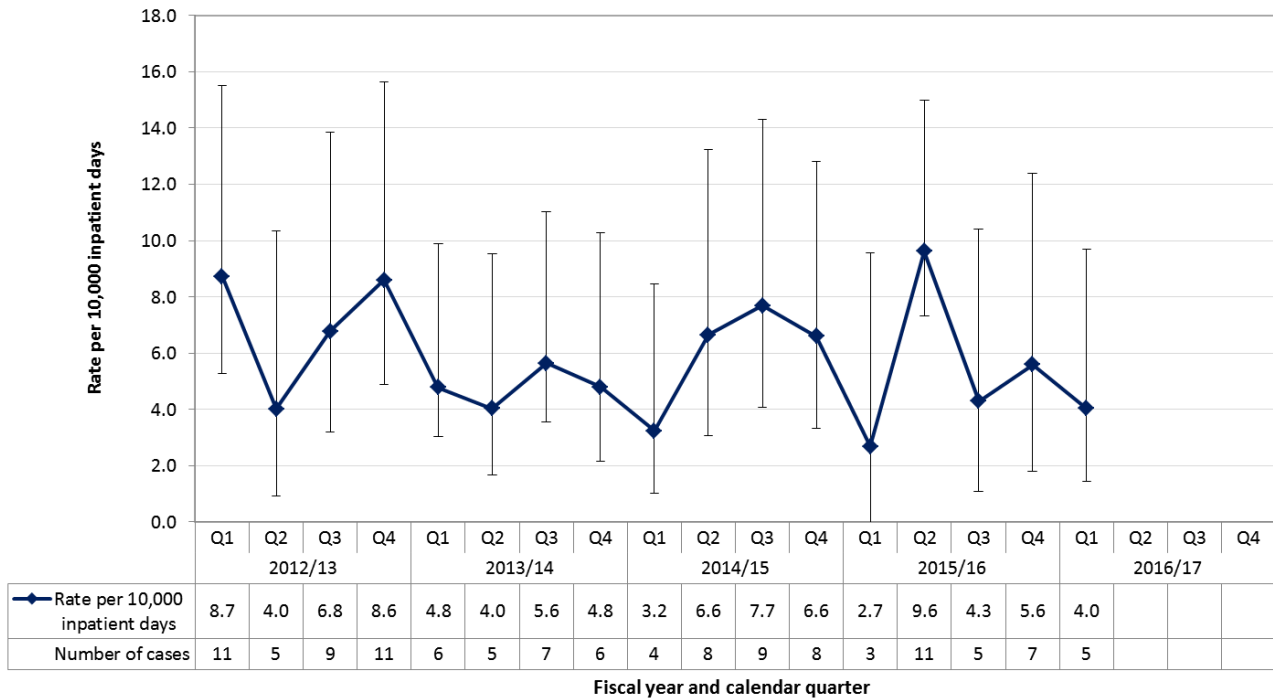


**Figure 6. Number of new cases and rate of CDI associated with the reporting facility, 2012/13 - 2016/17, Northern Health**



<sup>4</sup> Formerly known as Vancouver Island Health Authority.

**Figure 7. Number of new cases and rate of CDI associated with the reporting facility, 2012/13 - 2016/17, Provincial Health Services Authority**



**Disclaimer**

The purpose of this report is to provide information on healthcare-associated infections identified among the patients admitted to the acute care facilities to healthcare providers, decision-makers, patients, and the public. This report may be used, in whole or in part, as the basis for infection prevention and control practices to improve the quality of healthcare services. PICNet does not warrant or assume any legal liability or responsibility for the accuracy, completeness, or usefulness of any information in the report; neither does it intend to provide specific medical advice. Commercial uses are prohibited without express written permission.

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